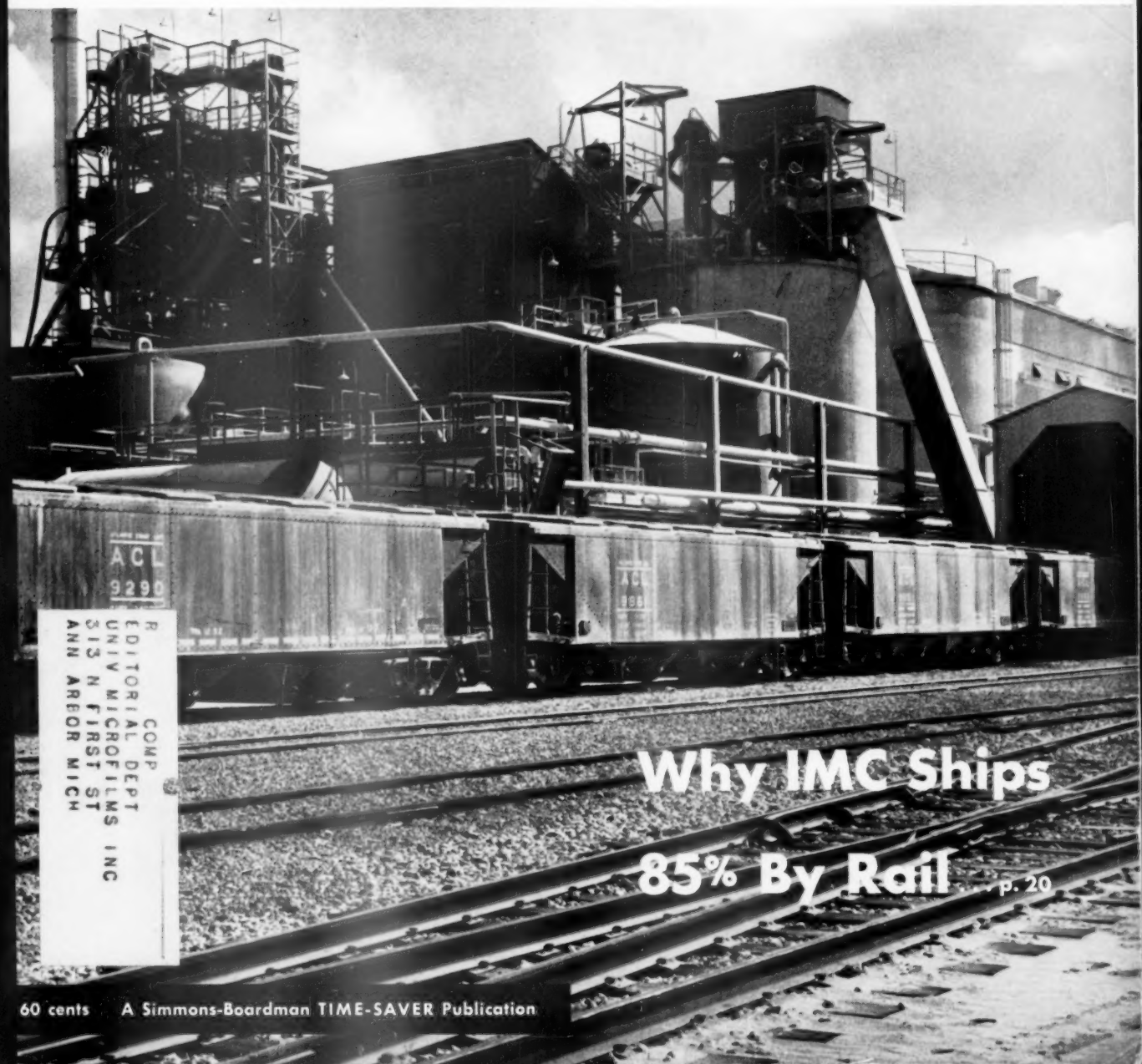
FREIGHT TRAFFIC ISSUE

Special—inside story on the birth of a new rate idea at REA Express... p. 30

June 26, 1961

RAILWAY AGE WEEKLY



R COMP
EDITORIAL DEPT
UNIV MICROFILMS INC
313 N FIRST ST
ANN ARBOR MICH

Why IMC Ships 85% By Rail ... p. 20

60 cents A Simmons-Boardman TIME-SAVER Publication

EVERY 8 HOURS OVER 100 CAR TRAILERS GET A "LIFT" FROM TRAVELIFT

Before this 30 ton capacity Travelift was put into service by Kenosha Auto Transport in this Northwestern Railroad Yard, optimistic estimates for loading car trailers by conventional equipment were around 100 trailers every 24 hours. After Travelift was installed, *actual* loading time has been over 100 trailers every 8 hours . . . a trailer every 2½ minutes . . . dramatic proof of Travelift's amazing ability to put a rock bottom price tag on piggybacking.

Consider these profit making features:

- Travelift power for all movements, including propulsion, is hydraulic, eliminating load shock and jar.
- Large heavy duty airplane type tires permit operation over even relatively rough terrain.
- Complete handling flexibility is yours with hydraulic self-propulsion, hoisting and steering; and 25 to 34 foot traversing area.
- Every operation is controlled by one man from a full view operator's platform.

Travelift costs less than you think. For most models less than $1,000 per ton lifting capacity.

For maximum freight handling and piggyback profits, get the full Travelift story. Fill out and return the coupon below today.

EVERYDAY TRAVELIFT IS SAVING SOMEONE MONEY IN A NEW WAY

Laying 78' rails to spike to gauge takes Travelift precision.

Transferring rails from stock pile to flatcar takes Travelift traversing.

Loading full truck trailers takes Travelift brute strength.

Travelift
Division of DROTT Mfg. Corp.
Sturgeon Bay, Wisconsin

CLIP AND MAIL TO:

TRAVELIFT, A Division of Drott Mfg., Corp.
Sturgeon Bay, Wis.

Gentlemen, please RUSH full information on Travelift.

Name .....

Company Name .....

Address .....

City .....**Zone**.....**State**.....

I am particularly interested in the following capacities:

30 ton ☐ **40 ton** ☐

NON-SPIN

MINER®

power hand brake D-3290-XL

SAFE · FAST · DEPENDABLE

W. H. MINER, INC. CHICAGO

If you worked like a freight car ...you'd lose your job

You probably spend at least eight hours a day at work. Statistics show that a freight car works an average of only 2½ hours a day. The rest of the time, it usually sits somewhere. It doesn't move . . . it doesn't work . . . it doesn't earn its keep.

That 2½-hour work day for freight cars can be substantially increased with modern classification yard control equipment that is now available from Union Switch & Signal. VELAC® Automatic Classification Yard Systems make freight cars move more . . . work more . . . earn more. In one recently completed yard, VELAC saves 3½ hours per car. In another yard, VELAC saves as much as 24 hours of the time previously lost by old-fashioned and expensive manual classification.

Now, to further reduce operating costs in terminal areas, Union Switch & Signal introduces a new push-button-operated Yard Traffic Control System to eliminate inefficient, costly manual switch operation in receiving and departure yards.

If you would like to have complete information about the VELAC Automatic Classification Yard System, or the UNION Yard Traffic Control System, contact Union Switch & Signal. Or, ask the people who have already installed this equipment.

"Pioneers in Push-Button Science"

UNION SWITCH & SIGNAL
DIVISION OF WESTINGHOUSE AIR BRAKE COMPANY—
SWISSVALE, PENNSYLVANIA
NEW YORK . . . PITTSBURGH . . . CHICAGO . . . SAN FRANCISCO

RAILWAY AGE

WEEK AT A GLANCE

June 26, 1961 • Vol. 150, No. 26

D&RGW: Fast facts for shippers

In less than one minute, Rio Grande can locate and transmit information on any freight car moving over its line. The new system cost $1.5 million ..... p. 9

Is a car shortage coming up?

Nearly half of the respondents to this month's Traffic Poll fear that a freight-car shortage may develop in the next few months p.13

C&O-NYC contest for B&O draws big crowds

A C&O-B&O combination, C&O President Tuohy told an ICC hearing, "is bound to strengthen the railroad picture in the East." p.14

Why IMC ships 85% by rail

The company, which spends upward of $50 million a year on transportation, likes the progressive tone more and more railroad managements are taking p.20

How REA's cube rate was born

The tariff is based on a brand-new concept of rate making that charges for the number of pieces and the cubic volume, rather than for weight p.30

You can double your reading speed!—Part II

This second of three articles prepared especially for Railway Age by The Reading Laboratory is designed to help you acquire new reading skills p.56

Arbitrators scale down BLE radio demand

Engineers are entitled to an arbitrary only when they are required to pass on radio-received work instructions to another employee, an arbitration board has ruled p.58

Departments

As the Publisher Sees It 64
Freight Carloadings 63
Ideas for Better Shipping 44
Industrial Traffic 67
Letters from Readers 17
New Equipment 63
New Products Report 61
People in the News 66
Railroading After Hours 52
Railway Market 63
Shippers' Guide 50
Supply Trade 66
The Action Page 70
Traffic Poll 13
Watching Washington 14
You Ought to Know 68

Editorial Staff

• Editorial and Executive Offices
New York 7, 30 Church St.

JAMES G. LYNE, Editor
ROBERT G. LEWIS, Publisher
JOE W. KIZZIA, Executive Editor
Managing Editor.....Fred C. Miles
News Editor.....Luther S. Miller
Traffic-Transportation.....G. C. Hudson
Mechanical
C. L. Combes F. N. Houser, Jr.
Signaling & Communications
Robert W. McKnight Robert J. Barber
Associate Editors
Rod Craib Harry M. Grayson, Jr.
Librarian.....Edith C. Stone
Editorial Assistant.....June Meyer

Art Director.....Russell F. Rypsam
Design and Layout.....Joel Petrower
Director of Research.....J. W. Milliken
Production Manager.....Joseph J. Menkes

• Chicago 3, 79 West Monroe St.
Western Editor.....Gus Welty
Regional News.....William V. Tuite
Mechanical.....Norman E. Gillespie
Engineering.....M. H. Dick
R. E. Dove E. W. Hodgkins, Jr.
Purchases & Stores..Bert Enos, Richard Stahl
Editorial Assistant.....Wanda Brown

• Washington 4, National Press Bldg.
Washington Editor.....Walter J. Taft

• The Hague, Netherlands, Lange Poten 29
International Editor.....Gordon Huffines

Railway Age, established in 1856, is indexed by the Business Periodicals Index, the Engineering Index Service and the Public Affairs Information Service. Name registered in U.S. Patent Office and Trade Mark Office in Canada.
Published weekly by the Simmons-Boardman Publishing Corporation at 440 Boston Post Road, Orange, Conn. Second-class postage paid at the Post Office at Orange, Conn. James G. Lyne, chairman of the board; Arthur J. McGinnis, president and treasurer; Duane C. Salisbury, executive vice president; George Dusenbury, vice president and editorial and promotion director; Robert G. Lewis, Joe W. Kizzia, M. H. Dick, M. J. Figa, vice presidents.

DEFINITIONS–

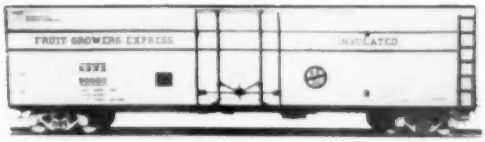
YOUNGSTOWN MEANS QUALITY

YOUNGSTOWN LIFT DOORS
FOR BOX CARS

YOUNGSTOWN SLIDING FLUSH DOORS
FOR REFRIGERATOR CARS

YOUNGSTOWN COMBINATION DOORS
FOR BOX CARS

YOUNGSTOWN LIFT DOORS
FOR AUTOMOBILE BOX CARS



YOUNGSTOWN SLIDING FLUSH DOORS
FOR INSULATED CARS

THE YOUNGSTOWN STEEL DOOR CO.

CAMEL SALES COMPANY • CAMEL COMPANY LIMITED

Cleveland • Chicago • New York • Youngstown

WEEK AT A GLANCE

The Action Page—The future is up to shippers

Railroads are inherently the nation's most economic form of transportation. Why, then, do shippers complain so little about the attacks on railroad vitality? **p.70**

Short and Significant

'Hot shot' express schedules . . .

introduced by New York Central have cut 24 hours from delivery time of freight bound from St. Louis and Chicago to Boston and other New England points, says NYC.

Washington-Baltimore pipeline . . .

along PRR right-of-way is reportedly under study by Potomac Public Service Co., in which PRR has a controlling interest. Initial use would be to provide aviation fuel to area airports.

A $5.5-million emergency federal loan . . .

is being sought by New Haven under the Defense Production Act of 1950. The road says it may have to ask for additional loans totaling $7 million before the end of this year.

Teamster President James R. Hoffa . . .

has excluded traffic moving on railroad bills of lading from the $5-per-trailer piggyback penalty payment demanded from Central States area motor carriers.

Number of bad-order cars . . .

totaled 166,059 on June 1, compared with 137,992 a year ago. The awaiting-repairs list, as compiled by the AAR's Car Service Division, includes 61,981 box cars.

Legislation for construction . . .

of the proposed 400-mile, $60-million Great Slave Lake Railway will be introduced at the current session of Parliament, says Canadian Transport Minister Leon Balcer.

Current Statistics

Operating revenues	
4 mos., 1961	$2,843,711,265
4 mos., 1960	3,235,661,513
Operating expenses	
4 mos., 1961	2,365,509,662
4 mos., 1960	2,547,745,911
Taxes	
4 mos., 1961	305,449,517
4 mos., 1960	360,794,962
Net railway operating income	
4 mos., 1961	45,823,462
4 mos., 1960	212,225,164
Net income estimated	
4 mos., 1961	Def. 9,000,000
4 mos., 1960	148,000,000
Carloadings revenue freight	
23 wks., 1961	11,856,035
23 wks., 1960	13,851,057
Freight cars on order	
June 1, 1961	13,964
June 1, 1960	36,106
Freight cars delivered	
5 mos., 1961	15,640
5 mos., 1960	25,360

Advertising Sales Department

Duane C. Salisbury—director of sales

New York 7, N. Y., 30 Church St., WOrth 4-3060
J. S. Vreeland—vice president; F. T. Baker—district manager; J. C. Lyddy—district manager

Chicago 3, Ill., 79 W. Monroe St., RAndolph 6-0794
J. R. Thompson—vice president; Hale Carey

Cleveland 15, Ohio, 1501 Euclid Ave., MAin 1-4455
H. H. Melville—vice president
C. J. Fisher—district manager
Daniel A. Denno

Pittsburgh 19, Pa., Suite 203, Carlton House GRant 1-8186
C. J. Fisher—regional vice president

Atlanta 9, Ga., 22 Eighth St., N. E., TRinity 2-6720—J. S. Crane

Dallas 19, Tex., 3915 Lemmon Ave., LAkeside 1-2322—Joseph Sanders

Los Angeles 17, Cal., 1151 W. 6th St., HUntley 2-4000
Fred Klaner, Jr.

San Francisco 11, Cal., 916 Kearney St. GArfield 1-7004
Lewis A. Vogler

Portland 5, Ore., Terminal Sales Bldg., CApitol 7-4993
Peter W. Klaner

London S. W. 1, England
TRafalgar 6318
67/68 Jermyn St., St. James's
Max F. Holsinger

Dusseldorf, Germany
Huttenstrasse 17, am Ernst-Reuter-Platz
Max F. Holsinger

Railroad employees' subscription rate: in U. S. possessions, Canada and Mexico, $4 one year, $6 two years, payable in advance and postage paid. To railroad employees elsewhere in the western hemisphere, $10 a year. In other countries, $15 a year. Single copies 60¢ except special issues. Address all subscriptions, changes of address and correspondence concerning them to: Subscription Dept., Railway Age, Emmett St., Bristol, Conn.
Change of address should reach us three weeks in advance of next issue date. Send old address with new, enclosing, if possible, your address label. Post Office will not forward copies unless you provide extra postage.
Circulation Dept.: W. A. Cubbage, Circulation Manager, 30 Church St., New York 7, N. Y.
POSTMASTER—SEND FORM 3579 to EMMETT ST., BRISTOL, CONN.

Printed at the Wilson H. Lee Co., Orange, Conn.

CENTRA-FEED

JOURNAL LUBRICATOR PADS WITH CENTER-FEED WICKING

DIRECT OIL FLOW to the Journal

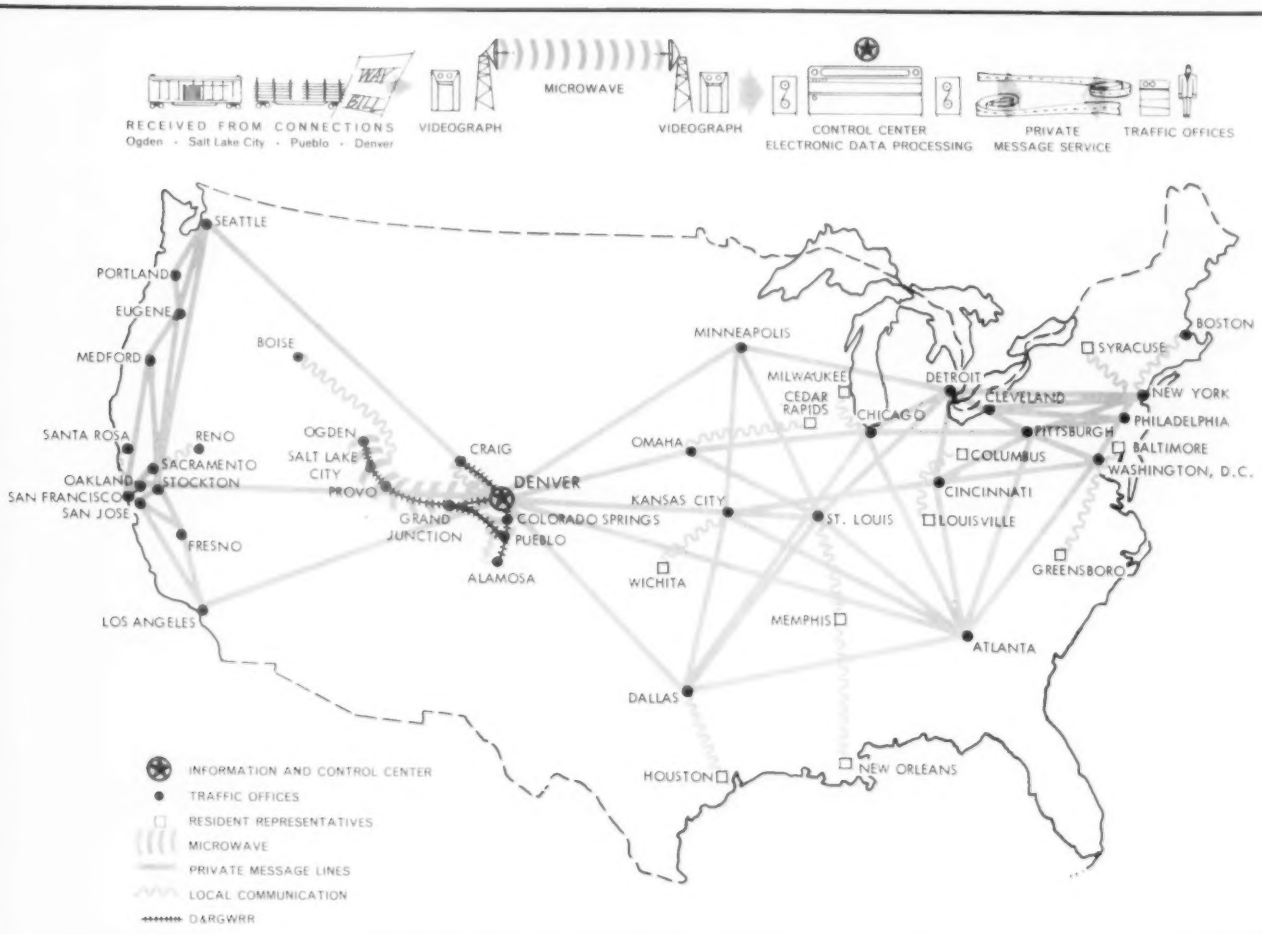
Plus **ALL THESE OTHER IMPORTANT FEATURES—**

- Extra-long, lock-looped, knitted cover
- Nylon pull strap for extra service life
- Continuous, all-weather wicking action
- Better oil coverage with contour fit
- A.A.R. Test Approved, exceeds requirements
- Four, highly resilient, elastomer cores
- Reversible. Built for heavy duty and re-use
- "Ear" sections, stabilize, reduce displacement

Write, wire or phone for more information or for our representative to call

Unity **RAILWAY SUPPLY CO., INC.**

MANUFACTURERS OF CENTRA-FEED JOURNAL LUBRICATORS
30 W. MONROE ST., CHICAGO 3, ILL. Phone: DEarborn 2-2827



D&RGW: Fast Facts for Shippers

► The Story at a Glance: A high-speed shipper information service has been inaugurated by Denver & Rio Grande Western. A new electronic system enables the railroad to locate and transmit, in less than one minute, information on any freight car moving over its lines. This is accomplished by the integration of high-speed facsimile equipment, microwave transmission, electronic data processing equipment and private wire teletype service to off-line traffic offices. In addition to providing faster freight car movement information to shippers and receivers, the electronic system will digest thousands of facts and figures to determine earnings and to control operating expenses on a daily basis.

Four years of planning, plus an expenditure of $1.5 million, lie behind Rio Grande's new "Shipper Facts" service.

Key to the operation is the swift and accurate transmission of waybills from the road's various terminals to one central point for processing. To do the job, Rio Grande is using:

- High-speed facsimile developed by Stanford Research Institute and A. B. Dick Co., working to the railroad's specifications.
- Microwave (for facsimile transmission) installed by Motorola Communications and Electronics.
- A Burroughs Corp. 220 computer which meets the road's requirements for faster computing, larger memory and more accessible storage capacity. (The 220 enables the railroad to store car-movement information on its magnetic tape Datafile, in addition to handling other data processing.)
- A 3,600-word-per-hour teletypewriter service, provided by Western Union, for flashing the processed information to off-line traffic offices.

Here's how the new information system operates, and what it is doing for shippers:

Waybills from principal Rio Grande terminals (Ogden and Salt Lake City, Utah, and Grand Junction, Pueblo and Denver, Colo.)—together with a code strip at the top of each copy showing the date and time, train number, direction, station and connecting road—are

MICROWAVE REPEATER STATION at Mines, Colo., elevation 12,470 ft, is at the Continental Divide about 60 miles northwest of Denver. Motorola 18-station microwave system has 12 repeater stations, such as Mines, and 6 terminal stations. D&RGW has put 12 voice circuits on the microwave system in addition to the facsimile.

forwarded to the computer center via the facsimile and microwave, as soon as a train is ready to depart from any of these terminals. The facsimile copy will be exactly the same size as the original document and all printed, typed or hand-written information will be reproduced in black print on white paper. It takes only 6 seconds to send each waybill from any one facsimile terminal to any or all other facsimile terminals.

Upon receipt of this facsimile copy of the waybill at the computer center, the following information is transcribed onto the magnetic tape in the computer's Datafile:

- Ownership and number of car in which the shipment is moving.
- Train number, date and time shipment actually moved.
- Date and time car is received from and/or delivered to connecting railroads.
- Date and time car is loaded and/or delivered at station on the D&RGW.

When a request is made for car movement data from this file, the information is printed out on a teletype printer direct from the magnetic tape in from 15 to 50 seconds. If the request is made for a car which has not been delivered to the D&RGW, the querying party is notified that a "banked" inquiry is stored (at the car number location) in the file. When the car is received and the movement information is being stored in the magnetic tape file, the "banked" inquiry will be printed out on the teletype printer and the shipper or traffic representative making the original request will be immediately notified.

As part of the normal operation of the Shipper Facts service, receipt of the facsimile waybills at the general office (traffic service information center) will initiate steps to keep traffic offices promptly informed of the car movements. From the "faxed" waybill copies, machine-punched cards are prepared—and from these a punched paper tape is prepared. This paper tape is placed in the Western Union private wire teletype transmitter and the car movement information is sent to the 28 D&RGW off-line traffic offices in the U.S. This information includes shipper, consignee, origin, destination, commodity, route, train, time, date and any special shipping instructions.

Freight Billing Centralized

The new high-speed facsimile system enables the D&RGW to centralize its waybill and freight bill preparation work. A bureau at the general office will prepare a waybill from the "faxed" copy of the bill of lading furnished by the shipper at any of the five principal terminals (Ogden, Salt Lake City, Pueblo, Grand Junction and Denver). The waybill prepared in this central bureau will be "faxed" back to the originating terminal and will be used to move the shipment.

On business terminating at these terminals, a copy of the waybill which has moved the shipment will be "faxed" to the central bureau and the freight bill will be prepared.

"The centralization of these two functions in a specialized bureau will provide a more accurate freight rate on the original shipment and a more accurate freight bill when received by the shipper or consignee," says Rio Grande.

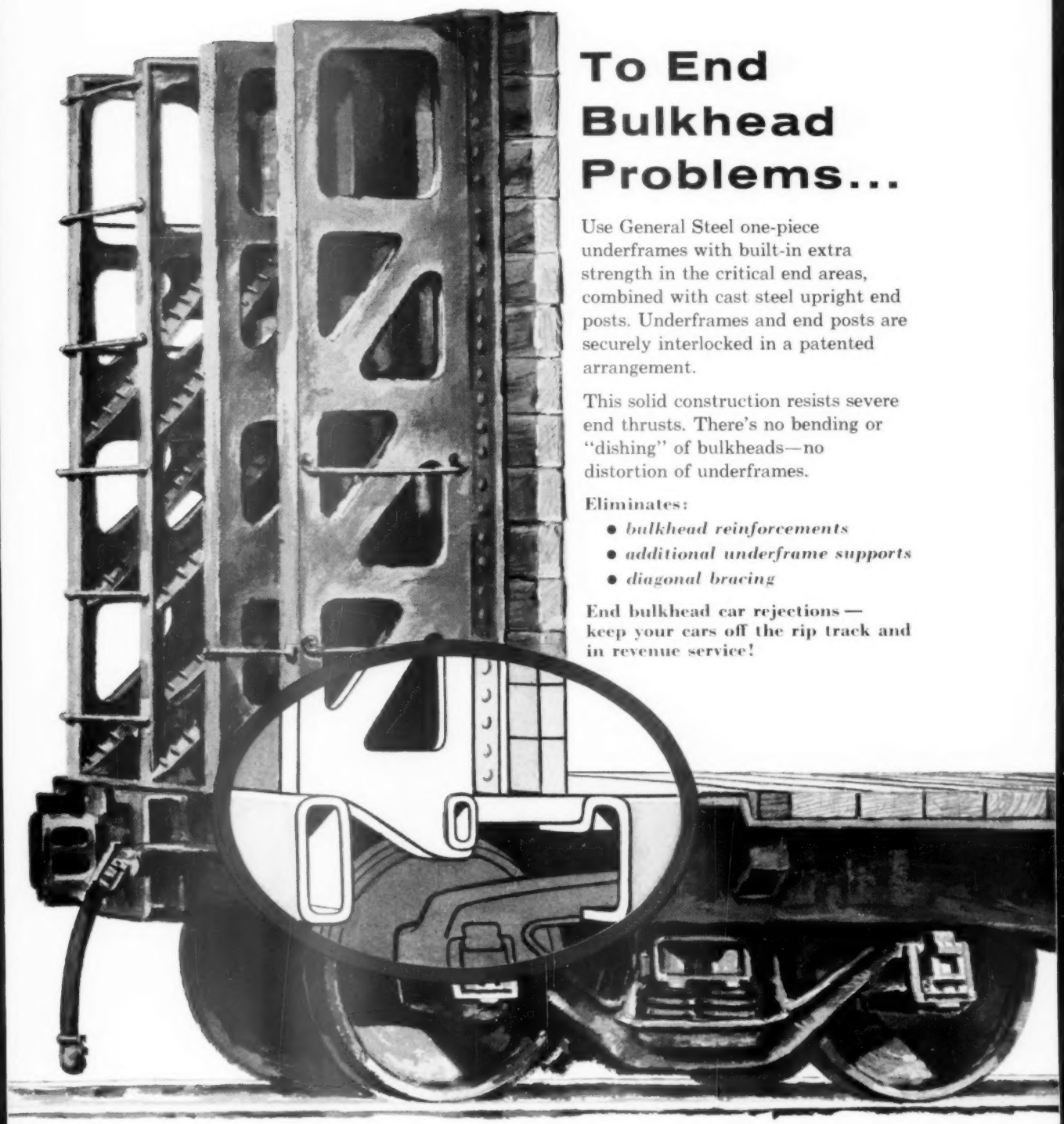
A carload inventory at principal terminals will also be kept on the computer's magnetic tape Datafile. When trains arrive at these terminals the car number, commodity, gross tons and final destination or connecting junction railroad on the D&RGW will be stored on the mangetic tape by individual terminals. A request from the Superintendent of Transportation for a report of cars on hand at any terminal can be printed out at the rate of 150 cars per minute. This will provide him with a complete picture of business on hand.

Information stored to answer shipper or traffic office inquiries also includes data necessary to accomplish car service accounting including that required for car rental accounts. The computations required for car service record accounting are performed in the 220 computer simultaneously with the storing of the information required for shipper inquiries. Burroughs Corp. has modified its 220 computer especially for the D&RGW to permit interruption of regular processing routines to interrogate the computer's Datafile.

In addition to keeping track of more than 50,000 passenger and freight cars that move over D&RGW's lines each month, the computer will be used for a variety of data processing and computing jobs. These will range from writing payrolls and manpower distribution reports for some 5,000 employees to preparing meaningful reports on tonnages, commodities, earnings forecasts, per diem payments, etc.

Estimated earnings will be computed from waybill information. For local shipments moving point-to-point on the D&RGW, all of the revenue would accrue to the Rio Grande. For interline or intermediate shipments, where revenue must be split among two or more railroads, a formula has been compiled and placed in the computer's memory which will compute that portion of the revenue due the Rio Grande for each carload shipment moved. This revenue estimate from waybills will be accumulated daily and on a month-to-date basis to enable the D&RGW to control operating expenses on a day-to-day basis.

Watching Washington, which usually appears on this page, is on page 14 of this week's issue.



To End Bulkhead Problems...

Use General Steel one-piece underframes with built-in extra strength in the critical end areas, combined with cast steel upright end posts. Underframes and end posts are securely interlocked in a patented arrangement.

This solid construction resists severe end thrusts. There's no bending or "dishing" of bulkheads—no distortion of underframes.

Eliminates:

- *bulkhead reinforcements*
- *additional underframe supports*
- *diagonal bracing*

End bulkhead car rejections — keep your cars off the rip track and in revenue service!

GENERAL STEEL INDUSTRIES

Granite City, Ill. • Eddystone, Pa. • Avonmore, Pa.

ST. LOUIS CAR COMPANY

St. Louis 15, Missouri, A Subsidiary

POSITIVE PROTECTION FOR YOUR JOURNALS AND BEARINGS

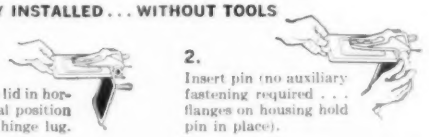
Light, sturdy, designed for long life and minimum maintenance, the Symington composite articulated journal box lid provides a tight seal against rain, snow, dirt. Over 3,000,000 have been sold to date.

Composite articulated journal box lids—originated by Symington—assure a weathertight seal, protect journals, bearings and lubricator against damage from dirt or moisture. Fully articulated, the ball-and-socket joint transmits spring pressure equally to all four sides of the lid face, automatically adjusts for variations in hinge lug holes or box faces.

This light yet sturdy lid features a cold-formed reinforced steel cover and a malleable iron housing, the latter with outsize pin bearing area to reduce wear. Likewise, the roller bearing on the torsion spring is extra wide—to minimize wear and provide easy lid operation.

Designed for separate or integral journal boxes on passenger or freight cars, the Symington composite articulated journal box lid has been awarded A.A.R. Certificates 1, 5, 11 and 43; meets Spec. M-120-51. For complete data, request Bulletin J-309.

EASILY INSTALLED . . . WITHOUT TOOLS



1. Place lid in horizontal position over hinge lug.

2. Insert pin (no auxiliary fastening required . . . flanges on housing hold pin in place).

3. Close lid to point where hairpin becomes free. Remove hairpin; close lid all the way. To remove, follow sequence in reverse.

Symington Wayne CORPORATION

SYMINGTON DIVISION

WORKS: DEPEW, N.Y.

New York
Chicago
Boston
Philadelphia
San Francisco
St. Louis

In Canada:
Adanac Supplies, Ltd.
Montreal, Quebec

JUNE TRAFFIC POLL

Is a Car Shortage Coming Up?

Proposition

Continued improvement in business conditions generally, and prospects for another large grain crop in 1961, seem to have caused some concern about possible freight-car shortages later this year. Senator Magnuson, chairman of the Senate Commerce Committee, said recently he has been told that box-car shortages this fall "will be greater than in the past."

Questions

1) Do you find that the car supply is presently adequate to meet your own peak-period needs, and those of your area?

Yes	49
No	9

2) Are you having problems obtaining the proper class of car—Class A box, for example?

Yes	20
No	38

3) From your information as to car supply and needs, do you anticipate possible shortages in the next four or five months?

Yes	28
No	30

Nearly half of the respondents to the June Traffic Poll share Senator Magnuson's fears that a freight-car shortage may slow down the nation's business recovery.

Only a handful of the shippers responding to the poll (9 out of 58) find current car supplies inadequate. Twice that number are finding it hard to get the particular types of equipment they want—e.g., special-device cars, Class A and double-door boxes. And 28 of the 58 see a worsening car-supply situation ahead.

But no picture of widespread alarm emerges from a careful study of shipper responses. A number of those recorded as fearing a car shortage later in the year qualify their answers with "possibly." Some, like E. S. Shane, traffic manager of E. L. Bruce Co., Memphis, Tenn., tie their predictions to "an appreciable increase in the economy." And predicted shortages are often limited to cars that are seldom in abundant supply at any time.

On the other hand, there is no evidence of complacency. Complaints about bad-order cars crop up frequently. Shippers who find present supplies adequate are often disgruntled about the condition of the cars they are asked to use.

The majority opinion appears to be summed up by A. E. Farina, general traffic manager of Baldwin-Hill Co., Trenton, N.J., who thinks the business upturn "will be gradual, giving carriers time to cope with it."

At the other end of the spectrum is George B. Vawter, traffic manager of Sun-Maid Raisin Growers of California, Fresno. Not only is he concerned about the immediate future (he "definitely" expects special-device cars to be in tight supply later this year) but he finds the shrinkage of the national freight-car fleet a source of long-term worry.

"A few years ago," notes Mr. Vawter, "we were talking in the vein of 10,000 cars a month and a car ownership of 2,000,000. Today the serviceable car ownership is less than 1,500,000 and the bad-order situation is such that causes real concern when it is considered that approximately 1 out of every 10 cars owned by the rail carriers is unserviceable."

And G. B. Miller, director of traffic, Crucible Steel Co. of America, Pittsburgh, warns: "Unless immediate action is taken to accelerate repair activities [in the East] a severe car shortage can be expected by September 1961."

H. N. Johnson, general traffic manager, Ralston Purina Co., St. Louis, also fears that "if the nation's business pick-up is as anticipated . . . there will be a terrific car shortage" because "railroads have not been building cars as fast as they have been retiring them."

Shippers who answered "Yes" to the third question of this month's poll were invited to specify the types of cars they expect to be in short supply. Class A boxes got five mentions; 50-ft boxes, six; double-door boxes, four; special-device cars, four; flat cars, three; Airslide cars, two; 40-ft boxes, gondolas, hoppers, and refrigerator cars, two each.

Of the 28 respondents who an-

(*Continued on page 48*)

As Railroad Men See It

Santa Fe fears that a second-half business upswing could lead to a box-car shortage during the harvest of fall grains in October-November. But Vice President C. R. Tucker told Railway Age that ATSF's car supply is sufficient to meet the demands of the winter-wheat harvest in June and July, and the road is presently experiencing "no problem in supplying high-quality box cars."

Western Maryland Vice President—Operations G. M. Leilich thinks the high ratio of bad-order cars nationally (9.7% on May 1) could lead to a shortage of box cars, particularly for commodities requiring high-grade cars. He foresees a shortage of hopper cars if there's a heavy second-half increase in coal, ore and stone loadings.

Frisco Vice President—Operations L. W. Menk looks for "possible spot shortages of A-AA wide-door 50-ft boxes and some hoppers occasionally." He reports that "due to a concentrated upgrading program" Frisco has the "best supply in recent years" of boxes for handling the grain crop.

Pennsylvania finds the present box-car supply adequate and anticipates "no particular difficulty" during the grain harvest, says Vice President—Operations J. P. Newell.

Great Northern's biggest problem, says Assistant Vice President J. L. Robson, is getting its own cars back home in peak periods. GN has 22,000 "well-maintained" box cars, highest ownership in 10 years or more, and it's "just a question of having them returned to us when there is a national car shortage."

C&O-NYC Contest for B&O Draws

► **The Story at a Glance: The ICC's public hearing on competing applications of the Chesapeake & Ohio and New York Central for control of the Baltimore & Ohio is now well under way in Washington. Starting last week with the C&O's presentation in support of its proposal, the hearing was expected to continue this week and next. Central's turn was scheduled to come after C&O completed its case, which includes the supporting presentation of the B&O.**

The C&O-NYC contest for control of B&O came to the public-hearing stage last week, drawing crowds which taxed the capacity of the ICC's largest hearing room. On hand for the sessions, which are being conducted by Examiner John L. Bradford, were top executives of the three roads, and an imposing array of counsel representing them and other interested parties.

Counsel for Central, on the first day, tried unsuccessfully to have the hearing postponed pending the Commission's ruling on a Central motion to dismiss C&O's application as "defective." Central's argument in support of its motion contends that Cyrus S. Eaton, chairman of the C&O board, should be a party to the case as an applicant for authority to acquire indirect control of B&O.

Mr. Eaton, Central also says, "is in every respect the dominant figure in C&O." Citing requirements of the Interstate Commerce Act's Section 5, Central's argument adds:

"Eaton is a non-carrier who already controls one carrier, namely C&O. If C&O should secure control of B&O, Eaton will indirectly secure control of B&O. . . . Such an acquisition of control of a second carrier is unlawful unless approved by the Commission and unless the acquiring non-carrier submits to regulation by the Commission."

WATCHING WASHINGTON WITH WALTER TAFT

• **ANOTHER DAHAN REPORT** advises the ICC to condemn Plan III piggyback rates. Plan III is that piggyback service which involves transportation on railroad flat cars of freight-laden trailers supplied by shippers.

THIS TIME, Examiner George A. Dahan would have the Commission require cancellation of Plan III rates for the transportation of new automobiles and trucks between points in Central, Southern and Southwestern territories. The proposed report is in I&S No. 7269 and related cases, and the rates in issue have been in effect for more than a year.

MUCH ADVICE on Plan III rates is now before the Commission. Another recent proposed report, in No. 33392, recommends approval of such rates on new automobiles and trucks moving from Cleveland, Detroit and Lorain to New England and Trunk Line territories. That advice came from Examiner T. Russell Roper, who supports the railroad view that the out-of-pocket basis is the "applicable cost test" in competitive-rate cases.

MEANWHILE, the Commission has not passed on Examiner Dahan's previous report of last August. That report, in No. 32533, recommends condemnation of numerous Plan III and Plan IV rates, the latter being those which contemplate that flat cars as well as trailers will be furnished by shippers.

ALSO PENDING, for nearly a year, is Examiner Lawrence B. Dunn's proposed report in No. 33021, which goes the other way. Mr. Dunn recommends Commission approval of some Plan IV rates.

GENERAL BASIS for Examiner Dahan's new condemnation of Plan III rates is his conviction that they "provide an incentive for the unbridled competition of unregulated transportation and obstruct the coordination of transportation by regulated rail and motor common carriers." Thus, he seems to regard Plan III as a rate-cutting device which offers no service that wouldn't be available at "normal" rates under Plan II or Plan V. These, in turn, involve piggyback service in railroad-owned trailers, and under joint-rate arrangements with truckers.

MORE SPECIFICALLY, as to the Plan III rates in issue, Examiner Dahan thinks the railroads should be charging for transportation of the trailers as well as for the autos with which the trailers are loaded. If they have not done so, "they should proceed to collect their undercharges," he says.

MOREOVER, the examiner suggests that no rate on new automobiles is lawful if it varies from the basis prescribed by the Commission more than 10 years ago in No. 29820, and was not cleared by modification of the order in that case. That order fixed rates on new autos at about 75% of the exceptions first-class rate.

THAT PRESCRIBED BASIS was not limited to the type of equipment used, but applied on autos "transported by railroad," the examiner points out. He adds that introduction of new equipment, such as trailers and rack cars, "does not affect the Commission's order."

AS TO THE COMPETITION, and how the railroads are to meet it, Mr. Dahan says they are in a position to do so with Plan II and Plan V rates. He would have the Commission announce its willingness to approve such rates on new autos if they are "no lower than the all-motor rates or the present all-rail 'regular' rates, whichever is lower."

Big Crowds

Noting that the motion was addressed to the Commission, Central's counsel asked that the hearing be adjourned to await the Commission's ruling. Examiner Bradford denied the request.

Meanwhile, President Walter J. Tuohy had opened the C&O presentation. A C&O-B&O affiliation, he said, "would be a joinder of a financially strong railroad with one that needs financial strength." Such a combination, he added, "is bound to strengthen the railroad picture in the East."

Inclusion of NYC "would delay these proceedings for years by injecting new and highly complex issues and controversial problems not present in our application," Mr. Tuohy also said. At the same time, he suggested that a C&O-B&O-NYC system might well be formed "at a later date." The C&O president then hastened to add:

"We must stress, however, that it must be a voluntary process to be successful. Any attempt to force such a merger will surely kill it for all time."

To the fore in Mr. Tuohy's testimony was his story of how C&O can help B&O and how it is already rendering substantial assistance to that road. With completion of the capital improvement and coordination program which C&O has in mind, "there will be savings before taxes, interest and depreciation of $44 million a year," Mr. Tuohy said.

B&O, he continued, "badly needs a modernization program," and the public in eastern territory "will benefit from such a program." The "economic self-interest" which would come to C&O with the proposed control would provide "the best possible assurance for development of the B&O and merger as soon as possible," Mr. Tuohy also said. He summarized what C&O is already doing for B&O as follows:

- Nine hundred C&O hopper cars have been constantly in use on the B&O for the past four months.
- C&O has agreed to provide B&O, as needed, with a total of 5,000 hopper cars.
- C&O's board of directors has approved the purchase from B&O of bad-order cars to the extent of $5 million. This transaction was entered to provide B&O with cash and to enable C&O to increase its fleet through repair of these cars.
- C&O has committed itself to provide B&O with up to 108 diesel road units at a mutually agreeable rate.
- For B&O stockholders, C&O has agreed to accrue for at least a year the difference between B&O dividends re-

(*Continued on page 60*)

track maintenance problems?

Call FOSTER

get track material ... PLUS

One call to Foster brings you any item needed for economical main-line or siding maintenance—"plus" all the track tools to do the job.

Your order can include everything from a single switch point, to complete turnouts, to one ton or a carload of new or relaying rail. Foster warehouses stock frogs, switches, switch stands, tie-plates, tool cars and dollies, hand tools, gauges, levels and hundreds of other track accessories—plus every standard rail section in use today.

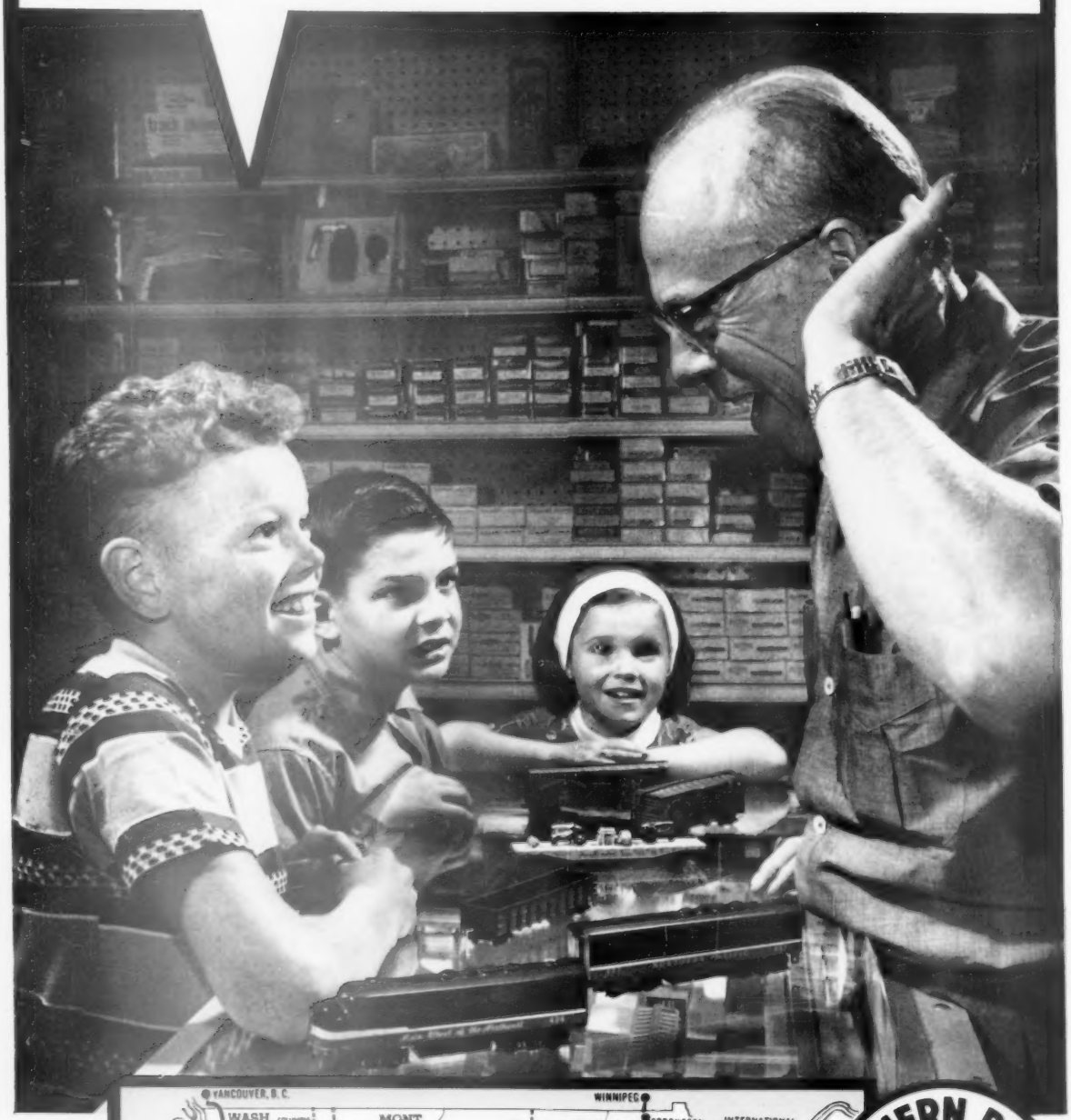
Another "plus"—Foster's warehouses are located all over the country, with complete stocks of track material, steel piling and construction items. You get the advantage of single-source buying, complete package shipments, and fast deliveries, at lowest possible costs.

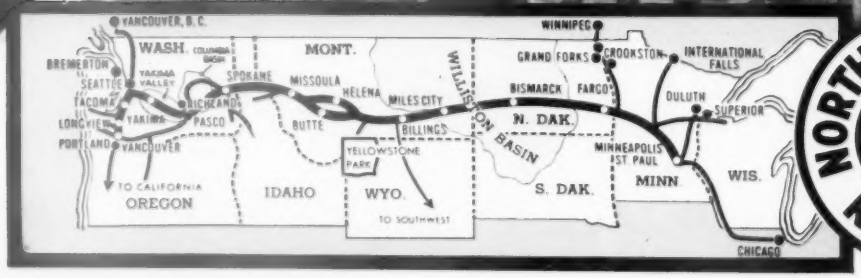
Call or write **L.B. FOSTER CO.** for rail catalog RA-6, Pittsburgh 30, New York 7, Chicago 4, Houston 2, Los Angeles 5, Atlanta 8, Cleveland 35.

Faster From Foster

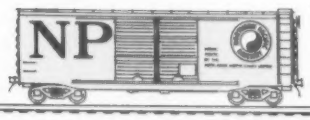
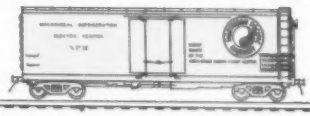
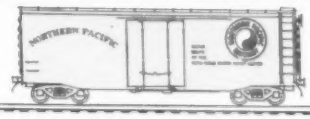
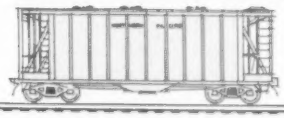
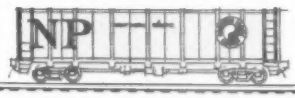
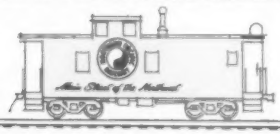
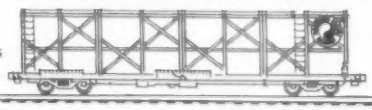
Rail, Track Material • Piling • Pipe, Valves, Fittings

"How many can we get for 10 MILLION DOLLARS?"





NP is buying these freight cars for $10 million in 1961

QUANTITY & TYPE		DESCRIPTION
248 Box cars with roller bearings		50½' 15' double door
50 Mechanical refrigerators		50½' roller bearings
200 RBL refrigerators with damage-prevention equipment		50½' roller bearings
20 Covered Hoppers		Airslide-Equipped
100 Wood chip cars		60' roller bearings
50 Cabooses		Steel, cupola type, cartridge type bearings
21 Auto Racks		Multi-level

"We just bought 15 new Diesel-electric locomotive units last year!"

NORTHERN PACIFIC...equipped to handle your freight!

LETTERS FROM READERS

Volume Key to Profits

Hubbard, Ohio

To the Editor:

I read with interest the results of the April traffic poll titled "Rate Cuts Would Boost Traffic" in the April 24, 1961, issue.

The comments made by a number of traffic men confirm my thinking and should certainly give the railroads some ideas on how to increase their business.

It has been my opinion that much of the railroad problem could be solved by increased volume since it is acknowledged that they are definitely a low-cost volume concern and this is their "inherent advantage."

It is also evident that the type of tonnage which they are best equipped to handle is heavy loading commodities which utilize their equipment fully. I might add the commodities which do not require special equipment and are not susceptible to damage are the most desirable for railroad handling; yes, and the most profitable.

Unfortunately, in spite of the many speeches made by railroad executives announcing new concepts of rate making, etc., which their companies are making to attract more business, I have found generally that pretty much the same old policy of charging "what the traffic will bear" is used, and not establishing rates that will attract new business and retain business they are now handling.

Unless business is actually lost to other forms of transportation there is little interest shown in a revision of rates which will increase per car earnings, and protect the business from inroads which may be made by competitive carriers.

If a competitive rate is published, all too frequently a part and maybe all of the business is lost forever.

This survey certainly should provide at least some serious thought on the part of the railroads' official family responsible for rate-making policies.

A. M. Broennle
General Traffic Manager
Valley Mould and Iron Corp.

Passenger Round-Up: 'Best Ever'

Baltimore

To the Editor:

Congratulations on your fine round-up piece on passenger traffic in the May 15 issue. It's the best thing I have ever seen on the subject.

W. H. Schmidt, Jr.
Director of Public Relations
Baltimore & Ohio

'A Fine Job'

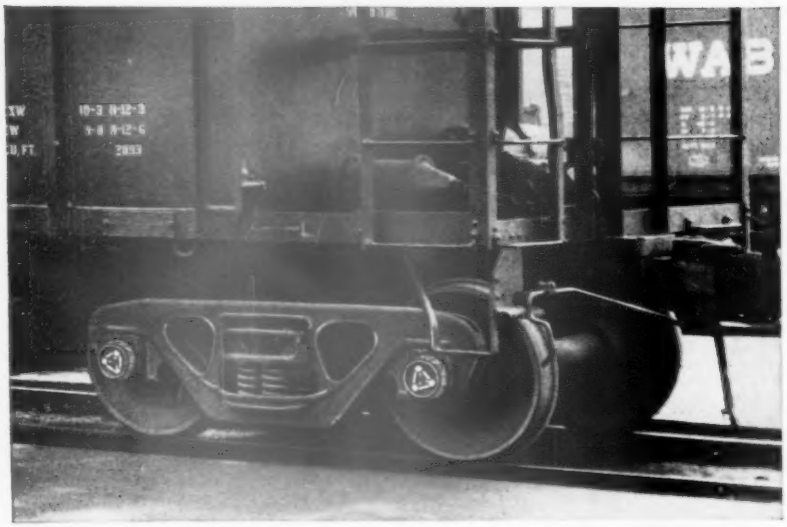
New York

To the Editor:

Since my return from Europe I have seen the interview in Railway Age ("What's Behind REA's World-Wide Expansion?", RA, April 24, p. 14) and want you to know that it was an excellently done piece and I have heard nothing but the most highly commendatory remarks about it. I congratulate you for a fine job.

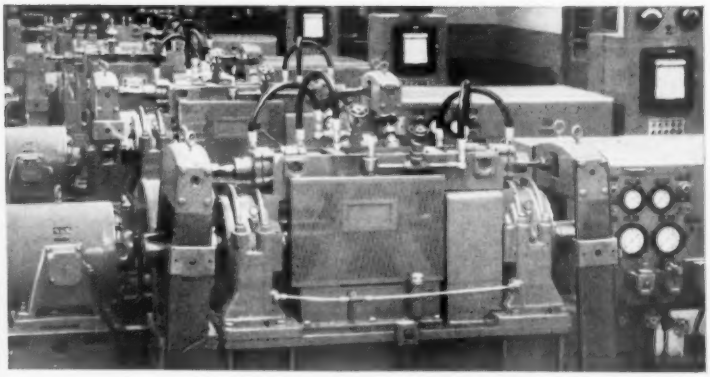
Anthony F. Arpaia
Vice President, International Services
REA Express

HOW HYATT TAPER WILL CUT YOUR OPERATING AND MAINTENANCE COSTS



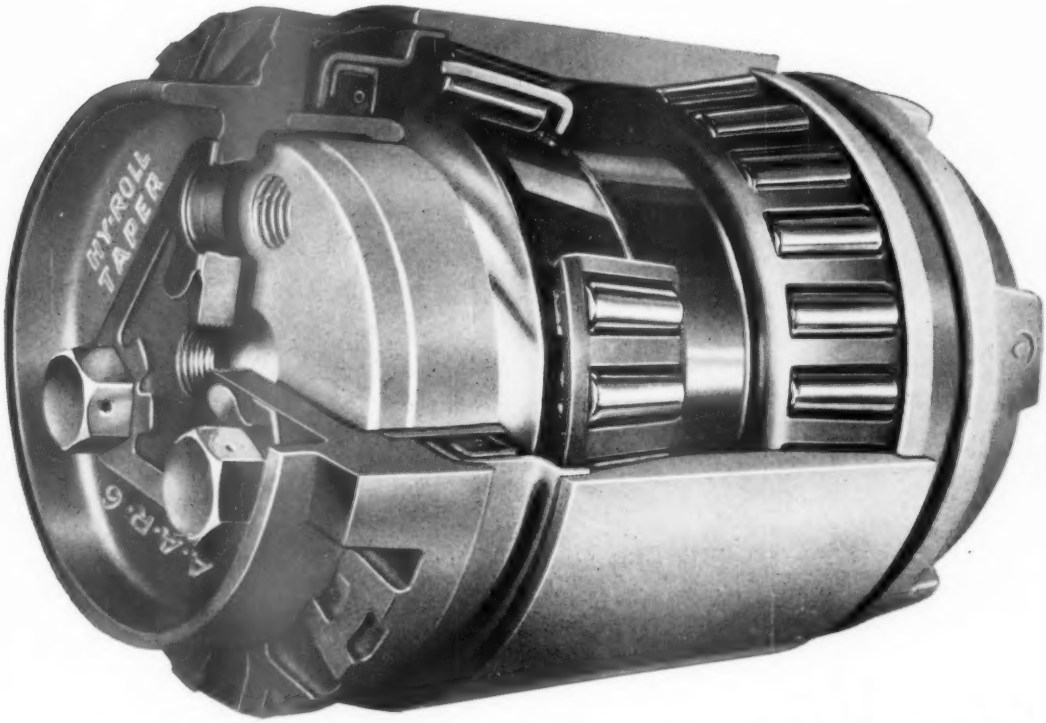
A Hyatt taper freight bearing installed in a pedestal type side frame. Hyatt taper freight bearings may be used interchangeably with other freight car roller bearings. Either a wheel press or hydraulic jack can be used to press on bearings.

Bearing parts are inspected to close tolerances using ultra-modern inspection devices. Care, consistant attention to details, and strict control of quality insures uniform performance and complete customer satisfaction.



Precision proves itself here in the Hyatt laboratory where hundreds of the Hyatt taper freight bearings passed their tests under excessive radial and thrust loads at speeds far beyond any they could be expected to encounter in actual service.

FREIGHT BEARINGS



NOW IN VOLUME PRODUCTION

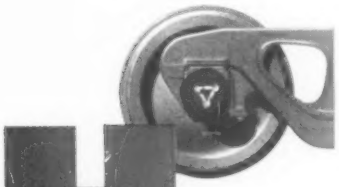
TO SERVE YOUR REQUIREMENTS FOR TOP QUALITY BEARINGS

You can virtually do away with costly maintenance and lubrication, and cut terminal bearing inspection time with Hyatt taper freight bearings. Pre-lubricated with a 3-year supply of A.A.R. approved grease, Hyatt taper freight bearings have a new double-lip, double-shield seal that holds the lubricant in and excludes dust, dirt, water and other foreign matter.

Manufactured to standards well above accepted commercial practice, Hyatt taper freight bearings incorporate the latest, newest and best in design, metals, seals and manufacturing. They're checked and double-checked to be sure that you get the finest bearings you've ever used.

Production quantities of Hyatt taper freight bearings are being manufactured in the 5½ x 10, 6 x 11, and 6½ x 12 sizes.

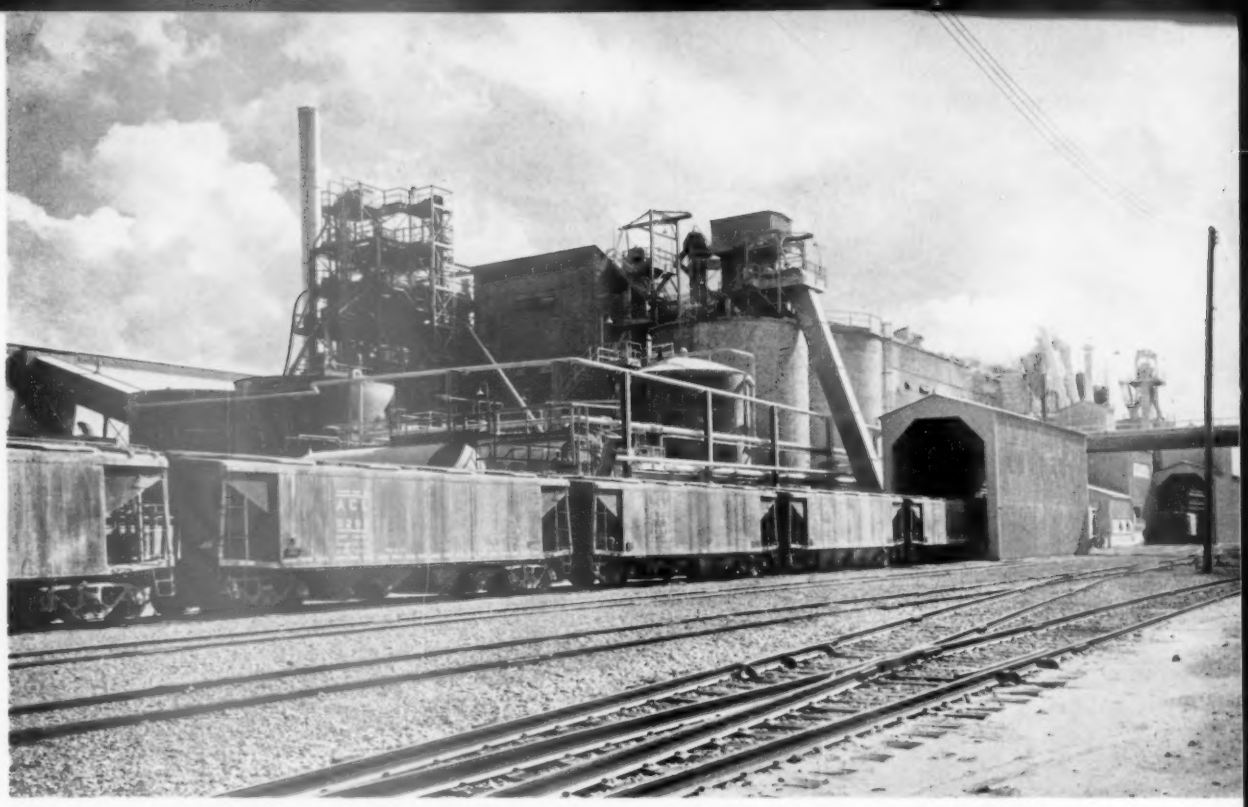
Join other leading railroads and look to Hyatt as your most dependable source for quality taper freight bearings.



Another GM contribution to railroad progress

HYATT *HY-ROLL BEARINGS* FOR NON-STOP FREIGHT

HYATT BEARINGS DIVISION, GENERAL MOTORS CORPORATION, HARRISON, N.J.



IMC PHOSPHATE OPERATIONS provide a steady demand for covered hoppers, as at this plant in Florida. The Agricultural Chemicals Division alone had a transportation bill of more than $34 million in 1960.

Why IMC Ships 85% by Rail

EXPORT SALES bulk large in IMC's operations—and moving huge tonnages of phosphate rock to port is a railroad job. IMC is now selling its products to almost 60 foreign countries throughout the world.

► The Story at a Glance: If railroads were to adopt Wayne Johnston's "get your foot off my neck" as a rallying cry, they'd likely find International Minerals & Chemicals Corp. front and center in the cheering section.

IMC spends upwards of $50 million a year on transportation—and the nation's railroads get better than 85% of that total. With this sizeable stake in the maintenance of efficient, economical rail transportation, it's not surprising that IMC keeps close watch both on railroads and railroad regulators. Eugene J. Landis, the company's director of transportation, likes the progressive tone more and more railroad managements are taking—but he's deeply concerned that the regulators are yielding, at least indirectly, to "high-pressure tactics" used by rail competitors seeking protection from railroads.

When much of a company's operating costs are accounted for by transportation expense, that company's transportation department faces a constant challenge to secure the best possible service at the most advantageous rate.

International Minerals & Chemical Corp.'s transportation forces have such a task—and railroads are helping them meet it, to the extent of providing transportation for about 85% of the annual tonnage shipped by IMC.

Years ago, IMC's products might have been captive to the railroads. Bulk commodities have traditionally been so—at least until recent years. Even today, much IMC tonnage moves by rail because there's no other practical way. But still, enough leverage is available to keep railroads wide awake to IMC needs, on both a service and a rate basis.

As a consequence, IMC and the railroads get along fine. Eugene J. Landis, IMC's dynamic director of transportation, who finds time to combine his duties at IMC with the chores of the presidency of Associated Traffic Clubs of America, says his company is "quite satisfied with the new . . . more liberal, more practical management on many railroads." It's the attitude of the overseers of railroading—the ICC, mainly—that brings the frown-creases to his forehead.

Railroads have learned on more than one occasion that inattentativeness can cost money, that IMC can be as flexible as any shipper in putting traffic where the service-rate picture is most advantageous:

- Sizeable shipments of IMC's triple superphosphate now move out from Florida by barge—in large part because of a rate advantage at the time the movement began. Railroad rates eventually were brought down. By then, though, the barging system was set up, warehouses had been built and distribution patterns had been set. The tonnage remained with the exempt-carriage barges.
- Potash shipments from New Mexico were considered rail-captive. Then the trucks moved in and cut heavily into rail tonnage. This time rail rates were cut quickly, and the railroad involved regained almost all the tonnage lost to over-the-road movement.

IMC's product line has undergone tremendous diversification over the past 20 years. Its major field, however, still lies in products used in plant foods: fertilizers. These are commodities of rather low value, shipped in bulk, which makes rate of extreme significance. But because the market for fertilizer is pretty well restricted to about 10 weeks in the spring and a shorter period in autumn, service also becomes of prime importance. Weather won't wait for shipments delayed because of a car shortage or a tieup somewhere en route.

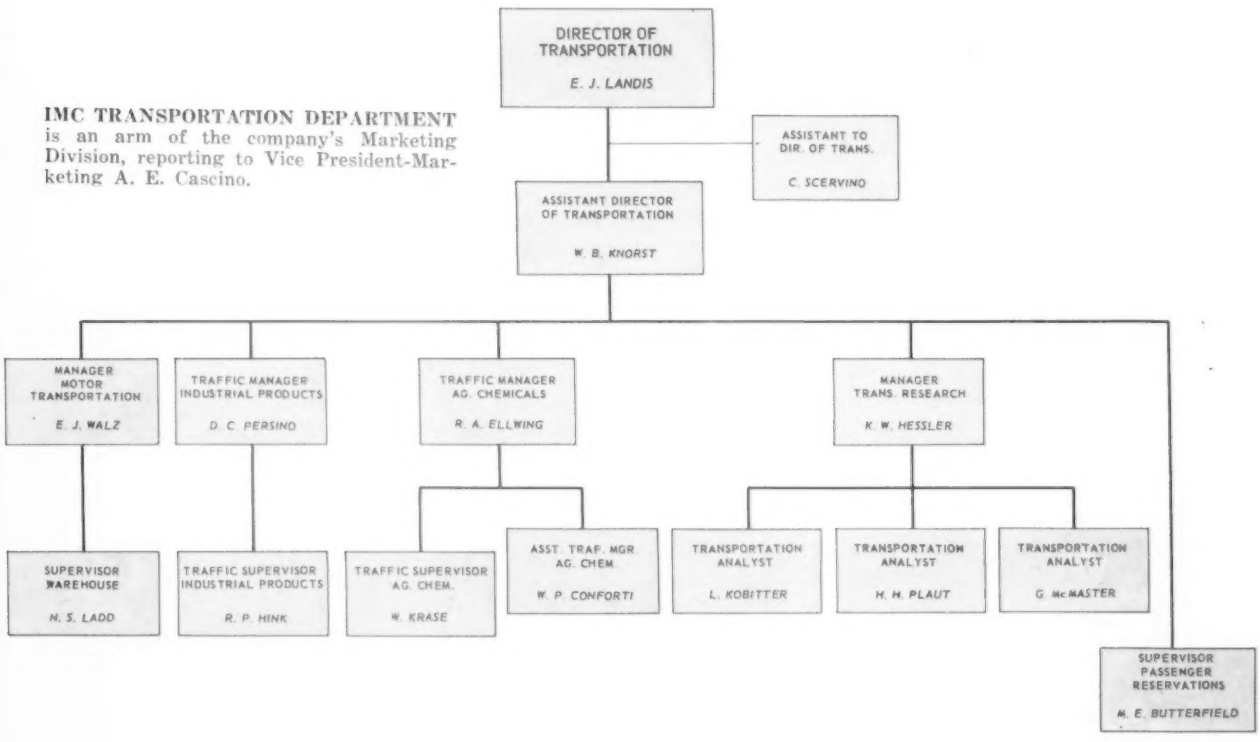
IMC approaches the car-supply angle from both sides. Through leasing arrangements with North American Car, General American, Shippers Car Line, Union Tank Car and Keith, the company maintains a fleet of 150 covered hopper cars and over 300 tank cars. It also depends upon railroads to maintain a ready supply of empties. Around IMC's transportation department there's high praise for a pair of Florida carriers, Atlantic Coast Line and Seaboard Air Line, for doing a bang-up job of furnishing cars when they're needed.

Service is a slightly more nebulous proposition. But here, again, IMC has no serious complaint. Mr. Landis knows railroads "can do better . . . they know that themselves." But, as he sees it, service is a matter where what the carriers can afford to do has to be balanced off against what they can't afford not to do. IMC's 85%-by-rail figure indicates no great unhappiness with any facet of rail operation—rate, car supply or service.

During 1960, IMC's shipments amounted to more than 9.7 million tons, of which better than 7.6 million tons was accounted for by the Agricultural Chemicals Division's movements of phosphate chemicals, phosphate minerals and potash. Not all the division's business was long-haul. About 1.9 million tons of phosphate rock, superphosphate and potash moved to port for export; and more than 1.1

(*Continued on page 26*)

IMC TRANSPORTATION DEPARTMENT is an arm of the company's Marketing Division, reporting to Vice President-Marketing A. E. Cascino.



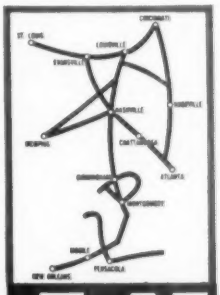
THIS IS AN L&N FREIGHT TRAIN!
IT HAS JUST LEFT CINCINNATI FOR NEW ORLEANS WITH INTERMEDIATE STOPS
This is a car in the train. Data on the punched paper tape about car number, contents, shipper, destination, and consignee will be put on magnetic tape at L & N headquarters; then "translated" by high-speed printer into legible English. Result: L & N always knows where a shipment is . . . when it is scheduled to arrive.

Millions for modern communications! Tape recorder, electronic computer, teletype, telephone, telegraph — all share in L&N's advanced communications network, costing many million dollars, and enabling L&N to pinpoint any freight car at any time, whether en route or at terminal.

Prompt information for shippers is one benefit of L&N's fast, sure communication system. Another advantage is increased efficiency at terminals, where train consists arrive well ahead in teletyped form, indicating how cars are blocked, or grouped, for their destinations.

One of the nation's great railroads, L&N offers you up-to-the-minute transportation to, from, and through the Central South, with 5,700 miles of main track, and 60,000 cars, a fleet which is among the five largest in the country. Equally important, L&N *stays* modern by continuing to invest in progress, with $47.5 million put into new cars and terminal equipment in 1960, and an additional $48 million being spent in 1961.

Ship L&N for operating know-how that means dependability, for modern facilities that give the shipper speed with safety! Contact *Freight Traffic Department, Louisville and Nashville Railroad, Louisville 1, Kentucky (JUniper 7-1121).*



L&N
THE DIXIE LINE

LOUISVILLE AND NASHVILLE RAILROAD

Vol. 4, No. 2

Railway Executive News

Published by Railroad Products Division, SERVO CORPORATION OF AMERICA
Copyright 1961 Servo Corporation of America
111 New South Road • Hicksville, Long Island, New York

How hot should a hot box be?

Engineers get to heart of question to answer certain misconceptions

Since the early days of railroading, the solid plain brass journal bearing has served to keep trains rolling. Principal advantages of this type of bearing are its simplicity of design; its ease of installation, service, and replacement; and its low cost.

However, friction develops heat, and in normal operation the friction bearing will naturally run warm. Therefore, lubrication is used. The problem arises when there is a lubrication breakdown – when the bearing runs *too warm*. This is commonly known as a *hot box*, a condition all railroadmen are familiar with.

And it is here that the questions begin.

Q – How hot is a hot box?

A – Statistics show that a normal bearing, under equilibrium conditions, will run 30°F above or below the mean operating temperature of all journals on the train. Therefore, a bearing whose running temperature is markedly above this range must be considered abnormal – and consequently be defined as a "hot box."

Q – Do all friction bearings run within this temperature range?

A – Not all. There are certain exceptions. Notably, in the case of new bearing brass which is not yet "worn in" to seat properly. However, its operating temperature will fall within the normal range in a short running period.

Q – Do hot box detectors measure bearing temperature?

A – No, and they do not have to. In the development of the SERVOSAFE® Hot Box Detective* system, for instance, engineers investigated this approach, as well as a number of others. Measurement of specific bearing temperature was ruled out – both as impractical and unnecessary.

Q – If actual bearing temperature is not measured, how can hot boxes be detected?

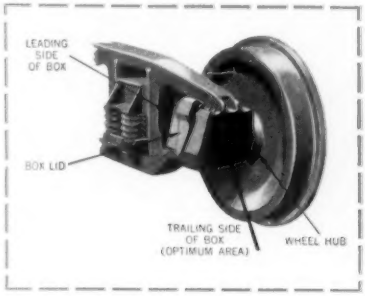
A – Refer again to the initial answer. Normal bearings run at a mean or average temperature. What that specific temperature, or heat, may be is unimportant. Key consideration is that a *normal heat standard* is established. By comparing the heat of all bearings to that standard, it is easy for the detector to tag the bearing (or bearings) that runs hotter than normal.

Q – Wouldn't it be better if the system detected specific "temperature"?

A – No, not really. Take the simple illustration of a person with a fever. If 98.6°F is considered normal, and he is running slightly warmer, his doctor knows this is a danger signal. The mere fact that his temperature exceeds the norm alerts the doctor to watch for further complications. The fellow with the fever knows that he is ill – and that he had better take early care to avoid a major illness.

Q – How can you detect bearing heat on a moving train?

A – Through the science of infrared, "the eye that sees heat." It's the same as feeling every passing journal box without touching it. The SERVOSAFE Hot Box Detective system "sees" or "feels" the trailing surface of every box. The back of the box, as pointed out in the accompanying illustrations, gives a proportioned reading closer to actual bearing temperature than any other spot.



TRAILING SURFACE SHOWS HOT BOX BEST

Tests conducted by a major Eastern railroad prove that the trailing surface of the journal box presents the optimum accessible area for hot box inspection. Presenting a low-mass path of thermal flux from the bearing, this spot responds most rapidly to bearing temperature changes. The SERVOSAFE® "slant-aspect viewing" method of scanning this optimum area is protected by Servo patents both in the U. S. and abroad. Hot boxes – as well as developing hot boxes – can best be detected the SERVOSAFE way.

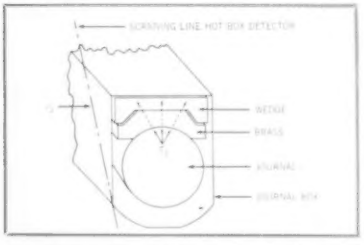
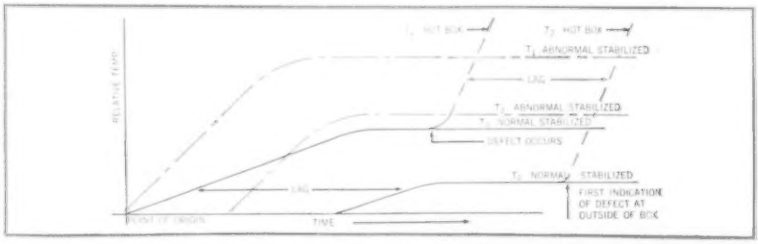


Illustration of typical bearing assembly shows how SERVOSAFE® Hot Box Detective* scans the trailing surface of journal box on passing train. T_1 = temperature of journal-bearing interface. T_2 = temperature of trailing surface of journal box.



Temperature on the scanned surface of the journal box (T_2) is proportional to temperature at the actual journal-bearing interface (T_1). For all practical purposes, then, SERVOSAFE® Hot Box Detective* sees the actual heat condition of each bearing. Once normal operating temperature for all bearings is established, the infrared detector can quickly spot all dangerously overheated, abnormal bearings, or *hot boxes*.

*Protected under one or more of the following U. S. Patent Nos.: 2,880,309, 2,947,857 and 2,963,575. Other U. S. and foreign patents pending.

Spread this railroad on your desk... spot an opportunity in 5 minutes!

If you like surprises, *flip through our Sales Kit!*

A **NEW** SERVICE ORIGINATED BY OUR

CREATIVE CREWS

THE MILWAUKEE ROAD

America's resourceful railroad

Are you aware of our railroad's effort to help solve your problems with specialized equipment? Do you know everything you ought to know about damage-free equipment? Are you getting the full benefits of electronic data car reporting? Are you familiar with all rate committee procedures? Are you familiar with export shipping forms? Let our salesman show you his Sales Kit and see!

This unique new service of the Milwaukee Road answers your questions. It keeps you posted on late developments that may spell big savings for you. It enables our salesman to show you the *complete* picture of a modern railroad, in terms of *what the railroad can do for you and your problems.*

The Sales Kit was developed by our Creative Crews to meet a very real need of present-day business management. Railroad equipment and services have changed more rapidly in recent years than many executives realize. That's why the Sales Kit is designed, not as a "conversation piece," but as a gold mine of practical ideas, with actual photographs of special equipment and services. The Sales Kit was designed with you in mind, so it's easy to use as a problem-solving tool. And it's as up to date as tomorrow's newspaper!

Spread our Sales Kit on your desk, and you'll quickly see where you can save, speed up shipments, serve and satisfy customers. Ask your Milwaukee Road salesman to prove it!

Route of the Super Dome Hiawathas and Western "Cities" Fleet

KEEP it clean

Steel-Corr doorway protection assures clean, dry lading . . .
a *fresh start* every trip.

Steel-Corr doors are always kept in protected storage, used once and disposed of—eliminating any chance of contamination.

And Steel-Corr doors cost less to buy and less to apply than old-fashioned methods.

Steel-Corr—the new material with years of experience.

INTERNATIONAL-STANLEY CORPORATION | 8401 WEST DODGE ROAD
OMAHA 14, NEBRASKA

WHY IMC SHIPS 85% BY RAIL (*Continued from page 21*)

million tons of phosphate rock moved intrastate in Florida. But much of the rest of the division's tonnage got a sizeable haul—enough to run the Agricultural Chemicals transportation bill to $34,070,474 (out of IMC's total transportation expense of $50,021,574).

Divisional transportation patterns may change somewhat in future years, but there'll be no slackening of the demand for transportation. IMC is now moving ahead with development of a new potash mine in Saskatchewan, Canada, which will begin trial shipments in the spring of 1962 and reach volume production and shipment by autumn of '62. Annual movement from the Canadian operation is expected to approximate one million tons (about the same tonnage that IMC originated last year at its Carlsbad, N. M., potash mine).

The changing face of transportation is evident all over IMC's product map:

- Inbound movements to fertilizer plants are almost 100% by rail—but only 10% by rail outbound, because outbound movements are destined for a local marketing area (usually of about 200-mile radius).
- Shipments of a feed supplement from Florida used to be all-rail. Now they are about 50% rail—because a relatively small amount of the product is used per finished ton of animal feed and IMC's customers have cut their storage space and, hence, their inventories. Now they prefer to get the supplement by truck, even if it's a bit more costly.
- Movements of IMC's Accent, a pure monosodium glutamate, go from California to Chicago (for packaging) and then nationwide. For the San Jose-Chicago move, IMC has gone from truck to all-rail piggyback to a shippers-association Plan 3 piggyback arrangement. It's a specialized move (the Chicago packaging plant has no rail siding) and, to date, it's the only operation where IMC can make good use of TOFC.

With high volume on one hand and commodity diversification on the other, it's not surprising that IMC maintains a transportation staff of 23 persons, including Mr. Landis and an assistant director, W. B. Knorst. Departmental organization also includes a manager, motor transportation; traffic managers for industrial products and agricultural chemicals; and a manager, transportation research.

Research, incidentally, has come to be a major function of the department—at least partly through a reorganization some four years ago in which transportation was made an arm of IMC's Marketing Division.

Research Manager K. W. Hessler (and three transportation analysts) range far and wide in an area that includes studies of new products which IMC might develop; so-called "offbeat" products in the current line; plant and warehouse location; and customer service (a field which is becoming increasingly important in IMC's market-oriented operation).

Part of this service function was carried out through a three-month tour last year by Mr. Landis and seven other IMC traffic experts, who visited customer plants to pitch in and help solve transportation problems (RA, June 27, 1960, p. 52). Another part is the transportation newsletter produced by Mr. Hessler and distributed to about 1,150 persons in IMC customer-companies.

This type of cooperation between IMC and its customers, coupled with the company's close liaison with the carriers, makes for the efficient service pattern the traffic demands. Gene Landis would like to see things working even more smoothly—but government's involvement in transportation and the vagaries of ICC regulation occasionally bring him up short.

"Just as railroads were starting to take a more liberal attitude on rates," he points out, "they got hit—by a recession and by vigorous opposition from their competitors, who seem to be using every means available to have the rate-making provision of the Transportation Act of 1958 changed. IMC, incidentally, has been very active in various organizations favoring liberal treatment of Section 15a [of the Act]. But now, as a result of high-pressure tactics, there are instances where the ICC seems to be yielding indirectly to pressure . . . in the way it judges freight rates."

In one instance, Mr. Landis notes, the ICC Board of Suspension refused to suspend a proposed rate because of a competitor's protest—but then the Commission itself entered a suspension.

Moreover, he believes, wrong decisions are being made on the guaranteed rate cases. "The Soo Line case is not coming out right . . . the [New York Central] carpet case was decided wrongly." As a large volume shipper, he adds, IMC "likes the idea" of the guaranteed rate and has followed the current cases closely. If such a rate principle should be approved, he indicates, IMC would audit its movements to see where guarantees might apply.

While he's happy with rail management generally and the way it's trying to run its business, Mr. Landis has a special word of praise — somewhat tinged with wonderment—for one particular railroad service: that offered by industrial development departments. IMC, he says, "has been very surprised at the vast amount of information available from the railroads about all fields pertinent to industrial development. Plant location is becoming a more sophisticated proposition . . . and these fellows in railroad ID departments are the unsung heroes. They're doing a tremendous job."

From Clerk to Transportation Director

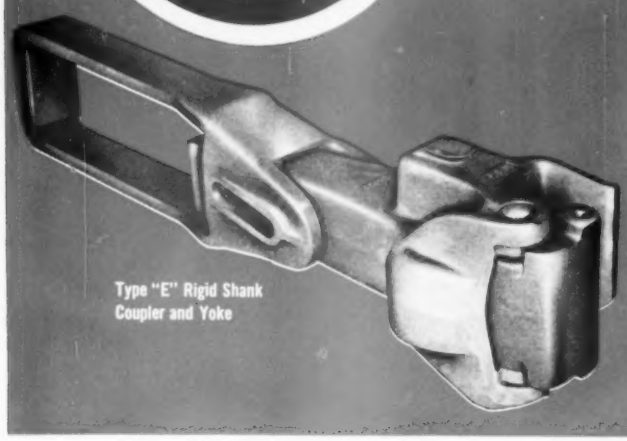
A young man who joined International Minerals & Chemical in 1941 as a junior rate clerk is now working on his fifth year as director of transportation for the multi-million-dollar corporation.

IMC's Eugene J. Landis was a familiar figure in Chicago-area classrooms in the years after he joined the company. He completed a law course and several traffic courses—and the payoff wasn't long in coming.

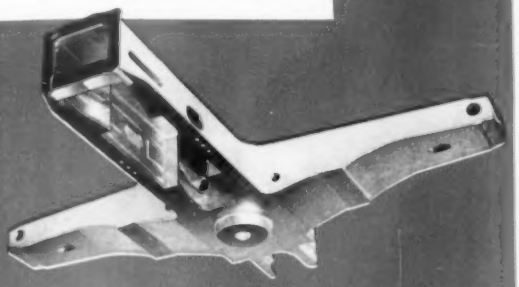
IMC made him assistant general traffic manager in 1946, general traffic manager in 1950, and director of transportation in 1956.

He's president of the Associated Traffic Clubs of America, immediate past president of the Chicago Traffic Club and a member of the board of directors of the National Industrial Traffic League.

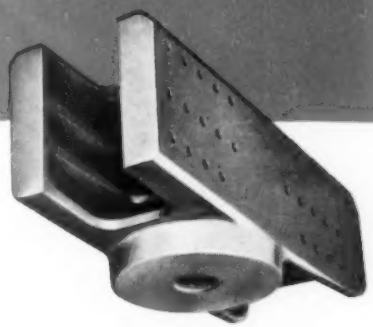
...TRADE MARK OF
DEPENDABILITY SINCE 1902



Type "E" Rigid Shank
Coupler and Yoke

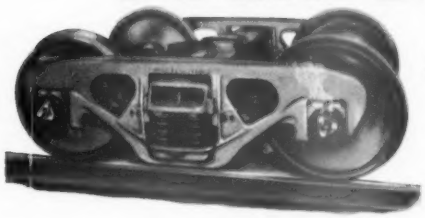


One Piece
Underframe End

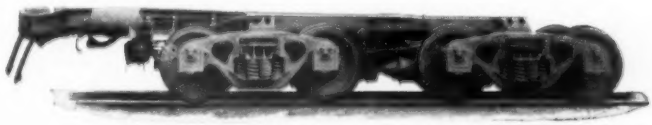


Bolster Center Filler with
Integral Center Plate

Buckeye Cast Steel COMPONENTS

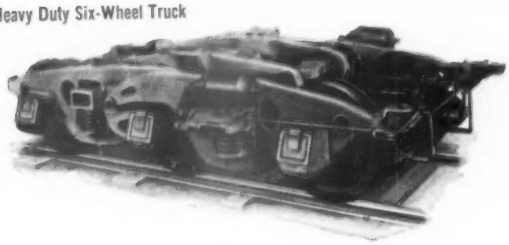


C-R (Cushion-Ride) Truck
with Roller Bearings



Heavy Duty Eight-Wheel Truck

Heavy Duty Six-Wheel Truck



FOR COMPLETE INFORMATION . . . CALL or WRITE

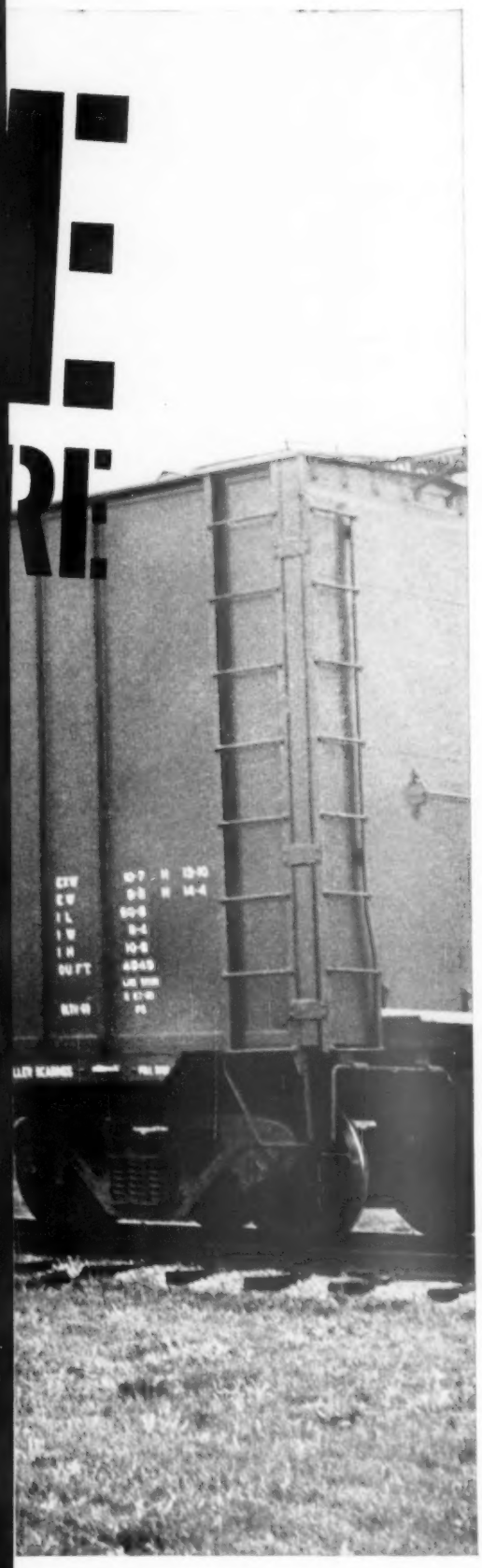
Refer Adv. No. 11886

The Buckeye Steel Castings Co.

RPI MEMBER

COLUMBUS, O.
NEW YORK, N.Y.
CHICAGO, ILL.
ST. PAUL, MINN.
SAN FRANCISCO, CALIF.

FRAGIL
HANDLE WITH CA
SOUTHERN
9007
SUPER
CUSHION
SERVICE
CAPY
LD LMT
LT WT



This new car does!

We call it our "Super-Cushion" car, and a baby-buggy couldn't give a more pampered ride to "handle-with-care" merchandise.

Southern sponsored the research from which this new-type box car was developed. And, thanks to the joint efforts of Southern's technical staff and a team of scientists from the Franklin Institute, University of Pennsylvania, this car "soaks up" coupling shocks with a special hydraulic shock absorption device.

This new car reduces your packaging costs, and expensive crating and bracing are no longer required. Here's proof. In recent experiments, we violently "test bumped" a load of 21,000 extra-fragile throw-away bottles in a conventional box car. Result: 2,096 broken bottles. When the test was repeated with our new "Super-Cushion" car, only 19 bottles were broken.

Other special equipment in this steel, single-sheath, 70-ton, 50-foot box car includes aluminum doors, Southern-designed sandwich ends, nailable steel flooring and roller bearings. This important addition to our ever-growing fleet of special-purpose freight cars is one of the many ways that we are tailoring our equipment and services to put the accent on the specific needs of our customers.

SOUTHERN RAILWAY SYSTEM

"Southern's Accent is on YOU!"

Case History of a Rate: How REA's

REA Express early this month put into effect a tariff, on china, based on a new concept of rate-making: charging for the number of pieces and the cubic volume rather than for weight (RA, June 12, p. 9). Initially covering china and earthen tableware shipments from Syracuse, N. Y., to all U. S. express points, the tariff is under study with a view to extending the concept to other commodities and other areas.

The rate-making theories—and cost studies—behind the new tariff have a much longer history than the tariff itself. A large segment of REA's key management personnel were involved in the final planning, studies and discussions. And while the first public announcement of REA's cube rate concept was tucked away in a speech in September of 1960, the new tariff itself was actually developed in a two-month period. Here's what happened—the step-by-step development of the new cube-rate tariff.

REA Commodity Tariff No. 39 had one of the shortest tariff-gestation periods on record. Born early this month, it had been conceived as recently as last Feb. 27.

The tariff contains "Local and Joint Interstate and Intrastate Rates and Charges Applying on China or Earthen Tableware from Syracuse, N.Y., to all Express Stations in the United States (Except Alaska and Hawaii)."

On Feb. 27, REA rate specialist Alan White read an article in a Railway Age Freight Traffic Issue headed "China Maker Needs Low Rates" (RA, Feb. 27, p. 22).

"In marketing china," the article began, "good transportation can mean a sale—and poor transportation can cause an order to be lost. Transportation costs —and fast, reliable schedules—are of prime importance when an industry ships from one location to distributors all over the country. The biggest and oldest U.S. manufacturer of china—Syracuse China Corp.—uses practically every form of common carrier transportation to keep its products moving to its nationwide markets."

The article went on to quote Syracuse China's director of transportation, W. S. Carter: "We are continually trying to effect savings which can be passed on to our customers. This means that the company's transportation policies are under constant scrutiny for ways that can cut transportation costs."

REA, likewise, is also constantly scrutinizing transportation policies for ways that can cut transportation costs, and Mr. White thought that Mr. Carter should know about some of REA's ideas. Four days after the Syracuse China article appeared, he wrote a letter:

March 3, 1961

Mr. W. S. Carter
Director of Transportation
Syracuse China Corporation
Syracuse, New York

Dear Mr. Carter:

It occurs to me upon reading the account of your problems in Railway Age that we might be of some further help to you in reducing distribution expense.

Our principal elements of cost, within broad limits, vary according to the number of pieces per shipment, regardless of size, weight or distance, according to whether one man or two men are required for sorting and transferring, and our line-haul cost varies strictly according to the cubical displacement regardless of the weight or number of pieces. You can appreciate, therefore, that the customary method of rate statement in weight units is incompatible with our cost pattern, since it exercises no effect upon number of pieces or container sizes.

The ideal method of determining charges from our cost standpoint would be a shipment-piece element that would be added to a displacement element, the latter varying according to length of haul. Tables are enclosed herewith showing the charges we could propose upon traffic receiving average handling and subject to average claim experience. The table of line-haul charges is simply a multiplication of 7¢ per cubic foot per 100 miles. You will note the possibility for substantial savings not only through reduction of container size but particularly in reducing the piece count. The latter, as to many products, can be accomplished by using larger containers, strapping, gluing or using outer containers. The rates would be especially attractive for heavy density freight.

It would be appreciated if you will let me know at your convenience if you think these rates would operate to our mutual advantage and, if so, the extent to which they might increase your patronage of our service.

Yours very truly,
Alan M. White
Assistant to Director
Pricing Division

Mr. Carter received the letter and did some figuring of comparative costs. A week later he replied:

March 10, 1961

Mr. Alan M. White
Assistant to Director
Pricing Division
Railway Express Agency, Inc.
219 East 42nd St.
New York 17, N.Y.

Dear Mr. White:

Thank you very much for your good letter of March 3rd . . . As far as the article in the recent issue of Railway Age is concerned, it is . . . a pleasure to know that it proved helpful . . . Of course, a lot more could have been said about the minimum or small shipment problem.

The comparatively new thinking that is expressed in your letter is indeed most interesting, and I hope that the time will come soon when the rating via your service on a cubic foot and mileage basis can be applied to our product.

I am sure that the so-called small shipments can be handled profitably if some carrier can get started on the right track and thus attract nearly all the shipments within certain weight brackets. Up to now, you have been restricted within a relatively narrow weight range . . .

You know, of course, that we are using your commodity tariff, ICC 8352, that applies from certain manufacturing areas. I helped in getting this started, and we are fortunate in having it, but the rates are still a little too high ac-

Cube Rate Was Born

cording to the thinking of many of our small customers—and we have a lot of them, to the extent of nearly 3,000.

I would like to see some carrier and preferably Railway Express really go after this small shipment business. The 45-piece dinner set is one of the most popular items in our line. It usually weighs 40 lb and the small jewelry stores seldom buy more than one set at a time.

The dinner set at 40 lb goes in a carton that has a cubic displacement of 1.9, so I called it two cubic feet. There are a few packages that would be a little larger, and that is why I recorded some figures in a column under three cubic feet. Such packages might weigh more, which would be all right as long as you could go up to 60 lb.

You can readily see the advantages in the two-cubic-foot package as well as the larger size, and I am glad to see someone come up with rates that show an advantage. . . .

In answer to your final question, I see no reason why your new rate proposals wouldn't work out to our mutual advantage and be very helpful to our customers.

Very truly yours,
W. S. Carter, Director
TRANSPORTATION

With a strong indication of interest from the potential customer, the next step at REA was an internal memorandum:

New York, N.Y., March 13, 1961
Mr. E. Boykin Hartley
Vice President

CUBE RATES

You will note from the attached exchange of correspondence that the Syracuse China Corporation desires us to publish the cube rate plan. Transportation Director Carter is most anxious to give these rates a trial and suggested we could publish with a 90-day expiration date if we wished to make a trial of what they will do for us. I recommend we proceed at once to publish them as an alternating section of our Earthenware Tariff No. 24, ICC 8352 without expiration date. . . .

Alan M. White

The memo came back with an endorsement, "The plan sounds good. EBH." On the same date, a telephone call to Syracuse China confirmed REA's intention to proceed with the new tariff.

The next step, which occurred two days later, was a letter from Syracuse China to REA:

March 15, 1961

Dear Mr. White:

It was a pleasure to receive your phone call March 13 in reply to our letter of the 10th stating that you are interested in progressing further the new cubic rate structure that will attract more of our small shipments.

Even under the chinaware and earthenware commodity tariff ICC 8352 that we enjoy, the rates are still high and you are pretty well priced out of the field except on those shipments that range between 21 and 50 lb. I am sure that you will agree this is a very narrow limit.

Just as a matter of interest, I made a quick check of yesterday's shipments. You received from us 832 lb via Railway Express. However, one of these shipments was for the New York Central dining car system in New York City, weighing 470 lb. . . .

This left 425 lb under the commodity tariff, divided as follows:

11 shipments, 19 to 40 lb
2 " 41 to 50 lb

In addition, a check was made on our small shipments that moved via motor, rail, or freight forwarder because of a rate advantage as compared with your commodity tariff. I find the following:

15 shipments, 50 to 100 lb
9 " 100 to 150 lb
9 " 151 to 200 lb

What we are aiming for, and I think other shippers and receivers are largely of the same thinking, is to try and come up with a carrier that can attract nearly all shipments under 250 lb. Under the cubic tariff, it seems to me we come pretty close to reaching that weight figure. . . .

Very truly yours,
W. S. Carter, Director
TRANSPORTATION

The next several steps at REA were internal. By March 27, exactly a month after Railway Age had described the nature of Syracuse China's small shipments problem, another REA memo went out:

New York, N.Y., March 27, 1961
Mr. William B. Johnson
President

CUBE RATES—CHINAWARE

Mr. W. S. Carter, Director Transportation, Syracuse China Corporation, Syracuse, N.Y., has asked that we publish a line of cube rates on earthenware and chinaware as described in REA Tariff 24, from Syracuse to all express stations in the contiguous United States.

Analysis of the proposal with supporting data is set forth in the attached rate proposal. Messrs. Navin and Bock of the Accounting Division have reviewed cost figures and state that any shipments that move on the proposed rates will easily clear REA out-of-pocket costs.

As indicated in the attached, the proposed rates should triple REA tonnage, and we recommend that publication be made as set forth in the proposal.

May we have your approval to proceed accordingly?

E. Boykin Hartley
Vice President Traffic

The memo was returned to Vice President Hartley marked, "OK, WBJ —3/31."

With the necessary approval obtained

"It occurs to me . . . that we might be of some further help to you in reducing distribution expense." . . . . . *REA's White*

"The comparatively new thinking that is expressed in your letter is indeed most interesting." . . . . *Syracuse China's Carter*

internally, the next procedure was to begin the mechanics of carrying a tariff through publication. Early in April, REA wrote the ICC Bureau of Traffic asking for an appointment to bring in a proof of the proposed cube rate tariff so as to conform the technical details of publication with the Commission's regulations. On April 12, proof of the proposed new tariff was reviewed with members of the Bureau of Traffic. On April 13, a copy of the proofs and proposals of the new rate schedules was sent to Syracuse. A reply came back promptly.

April 18, 1961

Dear Mr. White:

Thank you for your letter of April 13th, with which you enclosed proofs and proposals for the new rate schedules. . . . I assume that you will try and get approval of Section One and Section Two in one application.

If successful, I assume that Section One will replace the present commodity tariff for chinaware and earthenware particularly as far as we in Syracuse are concerned. That in itself should contribute to the saving of time and thus avoid calculation of the various increases that are necessary when using the old tariff.

Will look forward to meeting with you most any time during the morning of April 25th. . . . I have asked our packaging engineer, Mr. Arthur Harris, and our director of purchases, including packages, Mr. Richard Gaudern, to meet with us on the occasion of your visit.

Very truly yours,
W. S. Carter, Director
TRANSPORTATION

Mr. White's visit to Syracuse China April 25 wound up most of the final details. Syracuse China, which has for a long time had its own package testing laboratory working constantly to improve packaging, agreed that it would be possible to make the relatively simple changes in package design that would be necessary to take advantage of the new rates. Mr. White went back to New York to make a few last-minute changes in the proofs.

On May 3, REA Tariff No. 39 covering china and earthen tableware shipments from Syracuse, N.Y., to all contiguous U.S. express points was filed simultaneously with the ICC and the New York State Public Service Commission.

On June 7 the new tariff became effective and a week later, as forecast, REA shipments were moving out of Mr. Carter's Court St. plant at triple their former volume. "We anticipate savings of from $1 to $3 a shipment," Mr. Carter reports. "To me, this is new thinking, constructive shipping."

And Leo Kane, supervisor of shipping at Syracuse China's commercialware plant, adds: "The new Commodity Tariff No. 39 applying on chinaware shipment via REA Express provides the means of forwarding small shipments by a safe, dependable and now 'economical' carrier that was lacking to our dealers and their customers."

Cube Rate Principle Can Be Widely Applied

REA's new cube rate tariff has been published only for china and earthenware. But there is no reason why it can not be published for a wide variety of commodities.

"This could well lead to a freight-of-all-kinds cube tariff applying between all stations," says REA's Alan White. "No matter what's in the package, it has to pay us a fully distributed profit, as our valuation charges and other special services will continue to apply in addition to the basic freight rate.

Behind the new rate, it was explained, lies a year's work during which the talents of many traffic and cost experts in and outside the REA organization were drawn upon in developing the supporting data and shaping the tariff plan. In the course of this research, REA found that total costs for a shipment could be broken down into three elements. There is a fixed transaction cost for any less than carload shipment, regardless of its characteristics. There is terminal handling expense which increases with the number of pieces handled. (It is just as costly to handle four 15-lb shipments as to handle four 60-lb shipments. Conversely, it costs only one-fourth as much to handle one 60-lb shipment as to handle four 15-lb shipments.) And there is a line-haul charge, although, REA points out, most of the cost of handling small shipments is not in line-haul but in the terminals and for pick-up and delivery. On most small shipments, available space in the car is used up well before the maximum weight capacity of the vehicle is reached. Hence, space (or cubic volume), rather than weight, is the principal factor in line-haul expense.

REA's new tariff, therefore, bases the rate on a combination of two factors: the shipment piece count and the line-haul for various cubic volumes. The shipper determines the shipment piece count charge from a one-page schedule. The cubic line-haul charge is determined from a table based on a fixed charge of seven cents a cubic foot per 100 miles. (REA is preparing a table to give shippers a convenient method of determining a package's cubic volume from its dimensions. This will give the cubic figure in round numbers. Both 12 in. by 18 in. by 24 in. and 12 in. by 13 in. by 24 in., for example, are figured as 3 cubic feet, since that is the figure that would be used in the cubic line-haul charge table.)

Improved shipping practices will reduce REA's expenses, Mr. White says, and under this type of tariff "shippers who can achieve favorable ratios of piece-count and displacement to weight can be rewarded with substantial reductions compared with express, motor carrier and other weight-based charges." There is also, for shippers, "a continuing incentive under the application of the tariff to reduce their transportation costs through improved packaging without having to negotiate tariff changes with the carriers."

REA's traffic department personnel made it clear that this type of tariff is aimed particularly at the under 300 lb per shipment field where all small shipment carriers are suffering from the effects of the high manpower hour costs of piece handling. This is an area where the trucks have made substantial rate increases during the past year and claim to be still losing money. Costs of this nature on larger LCL shipments are being attacked by REA through experiments in containerization, palletization and many other modern techniques of materials handling.

Both Mr. White and Oliver G. Swenson, director of REA's pricing division, emphasized that the filing of the tariff does not conclude the story. Both Syracuse China and REA will keep a close watch on the effects of the new tariff, as it is expected that experience will suggest changes and modifications that should be made to increase the benefits to both shipper and carrier.

Shippers Along the Coast Line

One of a series spotlighting the companies that work and grow along the Coast Line

The C. F. Sauer Company's Duke's Division Plant, Greenville, S. C.

Quality Foods by the Trainload Lot

The C. F. Sauer Company, the Southeast's largest manufacturer and packer of flavoring extracts and spices, mayonnaise, dressings and oils, produces quality foods by the trainload lot.

Headquartered in Richmond, Virginia, the 73-year-old Sauer firm maintains a separate Duke's Division plant at Greenville, South Carolina, and a refinery producing edible oils at Charlotte, North Carolina. The company's combined facilities produce more than 100 different products—products of such quality as to have won 19 international awards.

Quality products of any nature deserve quality handling, such as Coast Line offers shippers. From extracts to half-tracks, all shipments on Coast Line enjoy individually tailored transportation services. Give us a call and let us discuss your shipping problems.

C. F. Sauer, III, as president of The C. F. Sauer Company, displays the same qualities of leadership which his father and founder grandfather brought to the family concern. Company vice president in 1949, and president since 1953, "Connie" Sauer has added new products, new methods and equipment, created a new look at the firm's Richmond headquarters, built the new half-million dollar plant at Greenville, and acquired the oil refinery at Charlotte.

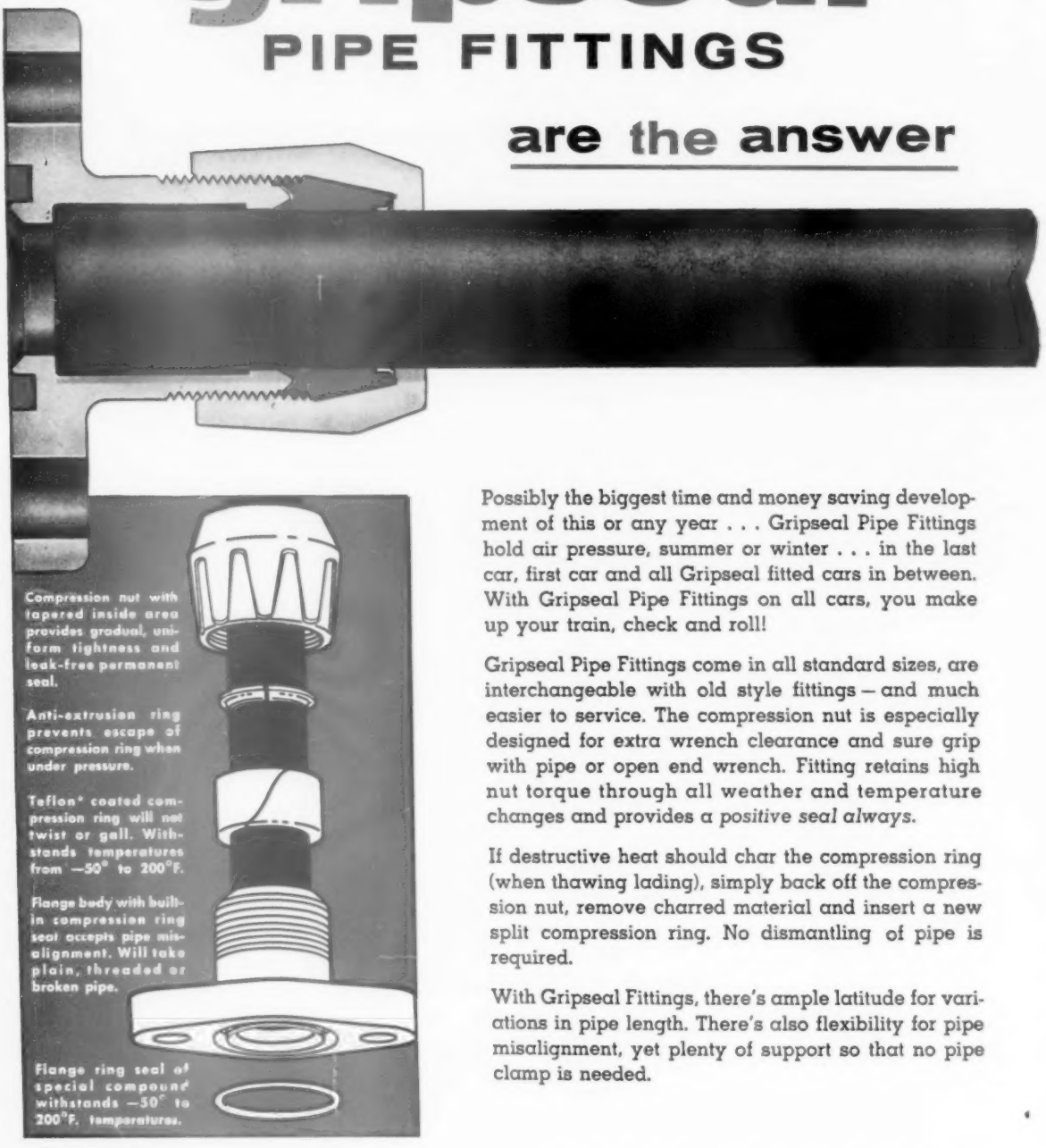
"Thanks for Using Coast Line"

ATLANTIC COAST LINE RAILROAD

...serving the Southeast Coastal 6

Leaky Air Lines Have Got to GO!

gripseal
PIPE FITTINGS
are the answer


Compression nut with tapered inside area provides gradual, uniform tightness and leak-free permanent seal.
Anti-extrusion ring prevents escape of compression ring when under pressure.
Teflon* coated compression ring will not twist or gall. Withstands temperatures from —50° to 200°F.
Flange body with built-in compression ring seat accepts pipe misalignment. Will take plain, threaded or broken pipe.
Flange ring seal of special compound withstands —50° to 200°F. temperatures.

*DuPont Trademark

Possibly the biggest time and money saving development of this or any year . . . Gripseal Pipe Fittings hold air pressure, summer or winter . . . in the last car, first car and all Gripseal fitted cars in between. With Gripseal Pipe Fittings on all cars, you make up your train, check and roll!

Gripseal Pipe Fittings come in all standard sizes, are interchangeable with old style fittings — and much easier to service. The compression nut is especially designed for extra wrench clearance and sure grip with pipe or open end wrench. Fitting retains high nut torque through all weather and temperature changes and provides a *positive seal always.*

If destructive heat should char the compression ring (when thawing lading), simply back off the compression nut, remove charred material and insert a new split compression ring. No dismantling of pipe is required.

With Gripseal Fittings, there's ample latitude for variations in pipe length. There's also flexibility for pipe misalignment, yet plenty of support so that no pipe clamp is needed.

Get all the facts — write for free literature.

PRI MEMBER

THE NEW YORK AIR BRAKE COMPANY

230 PARK AVENUE • NEW YORK 17, N. Y.

THE PERMANENT SOLUTION

COSTS LESS THAN YOU THINK

You can solve hot box problems for two-thirds the cost of roller bearings. Cleveland Graphite Bronze utilized design principles proved in its 40 years as a bearing specialist to build a bearing cartridge for all new or existing freight cars. Performance has been outstanding — millions of freight car miles without a setout, both in high speed and highly loaded service. Bearings don't Brinell under heavy impacts, nor will journals become pitted if cars are idle. Both installation and operating costs are satisfyingly low. Your shop can machine axles and apply cartridges without buying new machinery or special equipment. The greatest factors making up operating cost — frequency of part replacement and cost of parts — have been considerably reduced. There are three ways you can profit. If your next new car order calls for hot box protection, you can cut its costs with Clevite Bearing Cartridges. If cars are being equipped with old-style bearings, minimum addition to expenditure will put on Clevite Bearing Cartridges. Or, you can install them on existing cars in your own shops fast and at low cost. It will pay you to learn more by calling today. **Cleveland Graphite Bronze, division of**

CLEVITE

17000 St. Clair Avenue • Cleveland 10, Ohio

BOUND FOR SINGAPORE

"one-package" shipping to cut handling, protect cargo, increase payload

Truck-to-Ship—Lighter aluminum trailer-van container permits bigger payload, faster handling.

Truck-to-Rail—Aluminum containers are stronger, pound for pound, than steel, guard cargo better.

Truck-to-Plane—Smaller handling equipment, less labor, bigger payload, with aluminum.

The Finest Products Made with Aluminum are made with REYNOLDS ALUMINUM

...or the town next door

Containerization is revolutionizing the movement of freight–and the best containers are made of rugged, lightweight Reynolds Aluminum.

Containerization is a new concept that is changing the whole character of transportation and shipping; it's a new concept that means lower shipping costs.

You put your bulk cargo in a box that could be as large as a truck-trailer, and send it, box and all, to its destination. The container is never opened, your products are never rehandled, no matter how many transporting methods or vehicles are used enroute.

Consider these savings: One sea-land shipping service estimates that its stevedores handle *500 tons* per gang hour with containerized cargo. Compare this to *25 tons* per hour for ordinary break-bulk cargo!

There are other advantages. No multiple handling. No need for ship-side warehousing. Faster accumulation of shiploads and trainloads, faster turn-arounds for carriers.

The shipper gets faster, lower-cost service, and his cargo gets better protection; there's less damage because there's less handling. Pilferage losses are completely eliminated.

No wonder containerization is revolutionizing the movement of freight!

The key to containerization is, of course, the "box" that holds the cargo. And when you consider the job the container must do, the savings it must achieve, it is not surprising that so many containers are made with Reynolds Aluminum.

Aluminum containers—whether they're trailer-van size, or fork-lift size—provide the ideal combination of strength and light weight. Pound for pound, aluminum is far stronger than steel, so an aluminum container will take a real beating, and protect its contents through the roughest handling.

Weighing one-third as much as steel, aluminum means easier handling, less labor, and smaller equipment for shipping companies, faster service for shippers. And, because aluminum resists corrosion and won't rust, containers last longer, maintenance is easier, and there's less chance of cargo contamination.

Reynolds does not make containers; it does supply aluminum and aluminum know-how to leading container manufacturers. For their names, write to *Reynolds Metals Company, P. O. Box 2346-TM, Richmond 18, Virginia.*

Watch Reynolds TV show "Harrigan & Son", Fridays; also "All Star Golf", Saturdays—ABC-TV

REYNOLDS ALUMINUM

GENERAL AMERICAN'S

G-85

PIGGY-BACK CARS

ARE NOW IN SERVICE ON THESE RAILROADS:

Cotton Belt	**Through TTX**
Great Northern	Burlington
Northern Pacific	Illinois Central
Santa Fe	
Southern Pacific	**Through NITX**
Union Pacific	Erie-Lackawanna
Western Maryland	Monon
	Southern Pacific

America's most modern piggyback car—General American's G-85—is rapidly winning preference. It's no wonder, for the G-85 combines fastest tie-down and unloading with lowest clearance for trailers and racks of any standard 33 inch wheel car. Furthermore, the G-85 is built so there are no side limitations or obstructions on the car restricting width of containers, auto racks or future trailers.

G-85 production lines are rolling now. For information on delivery, call or write today.

Piggy-Back Division

GENERAL AMERICAN TRANSPORTATION CORPORATION

135 South La Salle Street
Chicago 3, Illinois
Telephone FI 6-4100

Piggy-Back GENERAL AMERICAN TRADE MARK

Offices in principal cities.

GOODYEAR
TRAIN

Southern Pacific offers shippers the largest fleet of Piggyback equipment in the United States!

Pioneer of Piggyback in the West and Southwest, S. P. first experimented with this fast, modern shipping service eight years ago. It was an unfamiliar sight, then, to see highway trailers speeding serenely by on railroad flatcars. But Piggyback looked like a winner from the start.

Today S.P. offers shippers all basic plans of Piggyback service as well as the largest fleet of Piggyback equipment in the United States. This includes approximately 2,700 specially equipped trailers and more than 1,200 flatcars strictly for Piggyback service. Many of the newest Piggyback flatcars are the extra-long (85'), lightweight Clejan type, which can carry two of the largest trailers or three 24- or 27-foot ones. These cars are best suited to our heavy-volume, fast-schedule requirements.

S.P. and subsidiaries have a total investment in Piggyback equipment and facilities in excess of $14 million. Our Piggyback business has shown spectacular growth each year—1960 tonnage was up 37 percent over 1959.

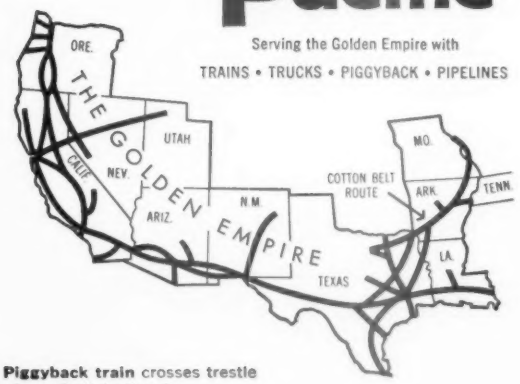
We have more than 60 Piggyback ramps at major shipping centers along our lines to facilitate fast handling of shipments to and from hundreds of communities. In addition, through Piggyback service to major shipping centers throughout America is available via connecting railroads.

S.P. Piggyback is *smooth*, *safe* and *sure*. It is also very popular. Our growing list of steady Piggyback customers includes automobile companies, shippers of perishables and export-import freight. They like the whole concept—ease and flexibility, lower costs, maximum protection for lading. As far as we can see at S.P., Piggyback faces as big and bright a future as any recent development in modern transportation.

For information on how Southern Pacific Piggyback and other freight services can help you, call on any S.P. Traffic Representative, located in principal cities throughout the country.

Southern Pacific

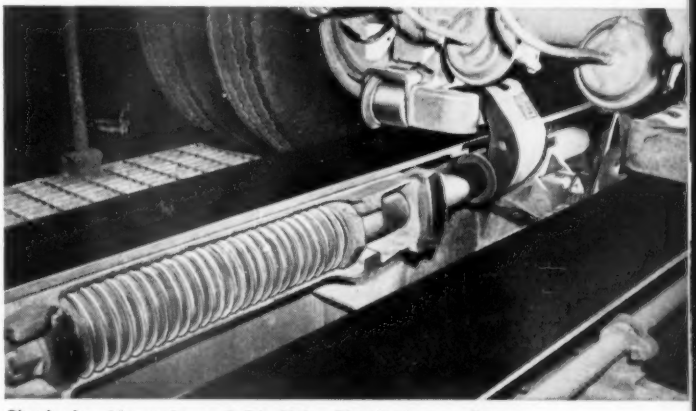
Serving the Golden Empire with
TRAINS • TRUCKS • PIGGYBACK • PIPELINES



◀ **Piggyback train** crosses trestle above Gaviota Beach near Santa Barbara, California.

Fast S. P. Piggyback schedules include overnight service between Los Angeles and San Francisco-Oakland areas.

More than 60 strategically located Piggyback ramps permit fast direct handling of shipments.



Shock-absorbing units on S. P.'s Clejan Piggyback cars allow controlled, cushioned movement for trailers.

Piggyback Ramp Locations

Southern Pacific

California
Bakersfield
Chico
El Centro
Fresno
Los Angeles
Mount Shasta
Oakland
Raymer
Redding
Sacramento
Salinas
San Diego
San Francisco
San Jose
San Luis Obispo
Santa Barbara
Stockton

Oregon
Coos Bay
Eugene
Klamath Falls
Portland
Salem
Roseburg

Nevada
Reno

Utah
Ogden

Arizona
Phoenix
Tucson
Yuma

Texas
Austin
Beaumont
Brownsville
Corpus Christi
Dallas
Edinburg
El Paso
Ennis
Fort Worth
Gregory
Hearne
Houston
*Lufkin
San Antonio
Skidmore
Victoria
*Waco

Louisiana
Lafayette
Lake Charles
New Orleans
*Shreveport

Cotton Belt

Texas
Corsicana
Dallas
Fort Worth
*Lufkin
Texarkana
Tyler
*Waco

Louisiana
*Shreveport

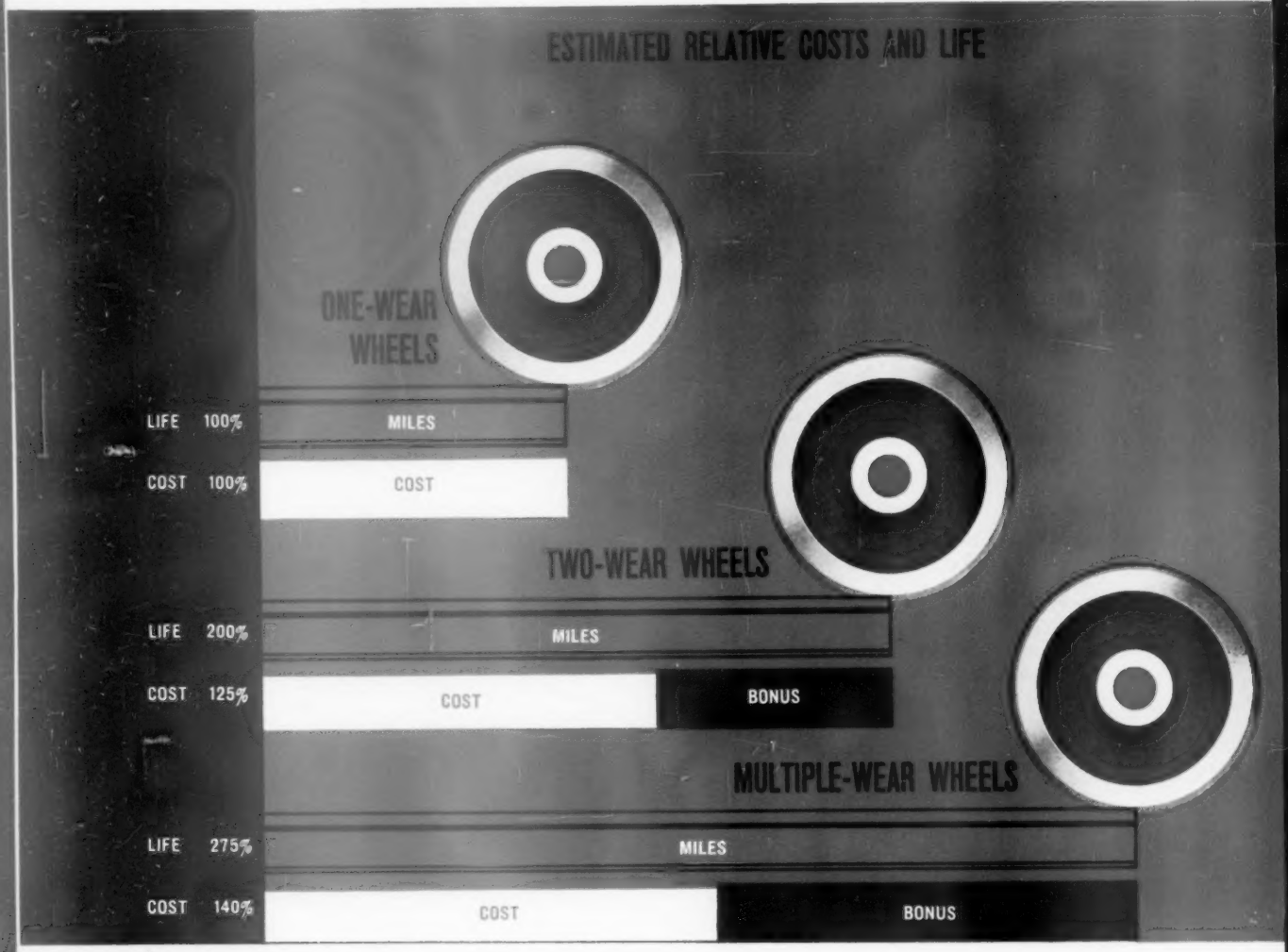
Arkansas
Camden
Jonesboro
No. Little Rock
Pine Bluff

Tennessee
Memphis

Illinois
East St. Louis

*Joint Southern Pacific-Cotton Belt ramp.

How to *reduce* wheel costs



EDGEWATER TWO-WEAR AND MULTIPLE-WEAR

rolled steel wheels

Not only do Edgewater rolled-steel wheels provide a substantial per-mile cost saving, but also an extra measure of safety They are made on the world's most powerful circular rolling mill. The Edgewater process produces wheels that are tough and hard – give long life under heavy loads and high speeds.

If you are looking for savings, here's a good place to start!

EDGEWATER STEEL COMPANY

P.O. Box 478, Pittsburgh 30, Penna.

a passing matter gets an immediate response

When you ask us for a "passing report" to locate your shipment along Union Pacific, the details volley back faster than ever before.

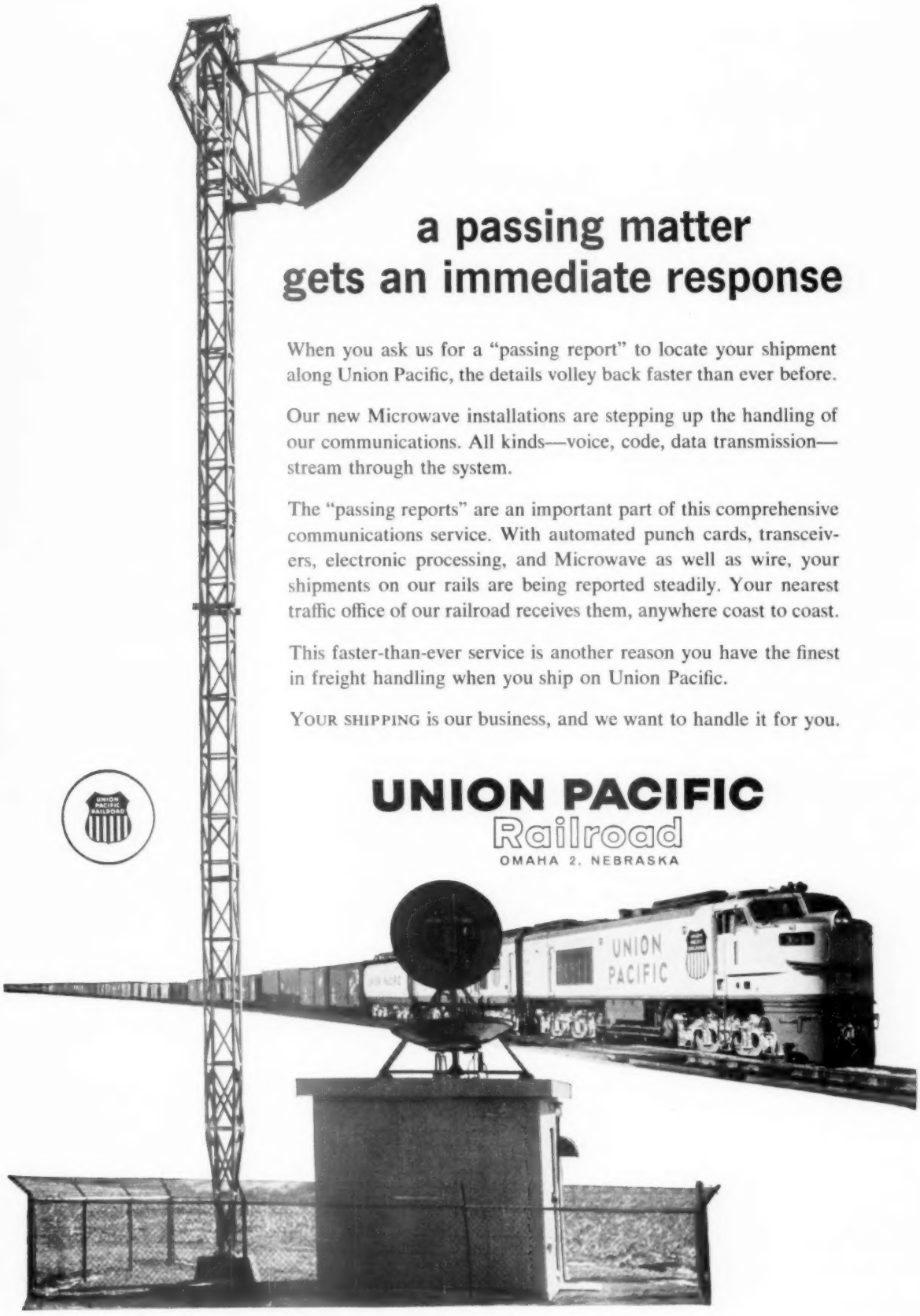
Our new Microwave installations are stepping up the handling of our communications. All kinds—voice, code, data transmission—stream through the system.

The "passing reports" are an important part of this comprehensive communications service. With automated punch cards, transceivers, electronic processing, and Microwave as well as wire, your shipments on our rails are being reported steadily. Your nearest traffic office of our railroad receives them, anywhere coast to coast.

This faster-than-ever service is another reason you have the finest in freight handling when you ship on Union Pacific.

YOUR SHIPPING is our business, and we want to handle it for you.

UNION PACIFIC
Railroad
OMAHA 2, NEBRASKA



Two-Way-Stretch Bags Reduce Breakage

Missouri Portland Cement Co. of St. Louis, following extensive in-transit testing, has begun packaging three of its four cement brands in bags made of extensible kraft paper. The paper—"Expanda-Kraft," made by the Hollingsworth and Whitney Division of Scott Paper Co.—was developed particularly for multi-wall bag and other heavy duty packaging applications.

The new bags produce major savings, Missouri Portland reports. In-transit breakage has been reduced as much as 50%. The extensible bags "give" upon impact and absorb strains and stresses that ordinary kraft cannot. This substantially reduces damage claim costs per shipment. Also, stacking is improved with extensible bags because the Expanda-Kraft paper has a resistance to slippage, which reduces bag sliding.

An average shipment consists of 1,000 bags of cement in a box car, Missouri Portland reports. Using regular kraft bags, breakage had varied from a few bags up to as many as 100 to 120 per carload. Tests were made with one-half of a box car stacked lengthwise with bags made of conventional kraft, and the other half lengthwise with bags of Expanda-Kraft. Bags were stacked eight high, four rows across. After humping and movement to final destination points, breakage of the ordinary bags was twice as high as that of extensible bags. Repeated tests gave virtually the same results.

Lumber Studs Bagged

Morrill & Sturgeon, a Portland, Ore., lumber company, report good results in transcontinental shipment of redwood and white fir studs in bagged units on flat cars. Daily loads go out on flat cars with a covering of two-layer kraft paper with a fiberglass liner developed by Crown-Zellerbach Corp. Cars arrive in the East with a minimum four- to five-inch shifting and with torn bags a rarity. Customers welcome the packaged studs, because the lumber within is kept waterproof, dustproof and sunproof for months.

The 8-ft studs—8-ft 2x4's—are loaded in double floating loads of twenty units per flat car. Morrill & Sturgeon call this their "Twin-Ten Load" to emphasize that the cars can be stopped over for partial unloading, providing ten units are taken off at each stop. The units are tied together and held down by steel strapping. Each unit has its own waterproof cover, which being waterproof, permits outside storage.

Yards with fork lifting equipment can load or unload the cars in about thirty minutes time, which gives shippers and consignees a good saving in time and cost of loading and unloading. The railroads are also in a position to participate in the savings, since use of the flat cars releases double door box cars for other loading, as well as increasing utilization of the easily maintained flat cars.

Delay Ice-Salting

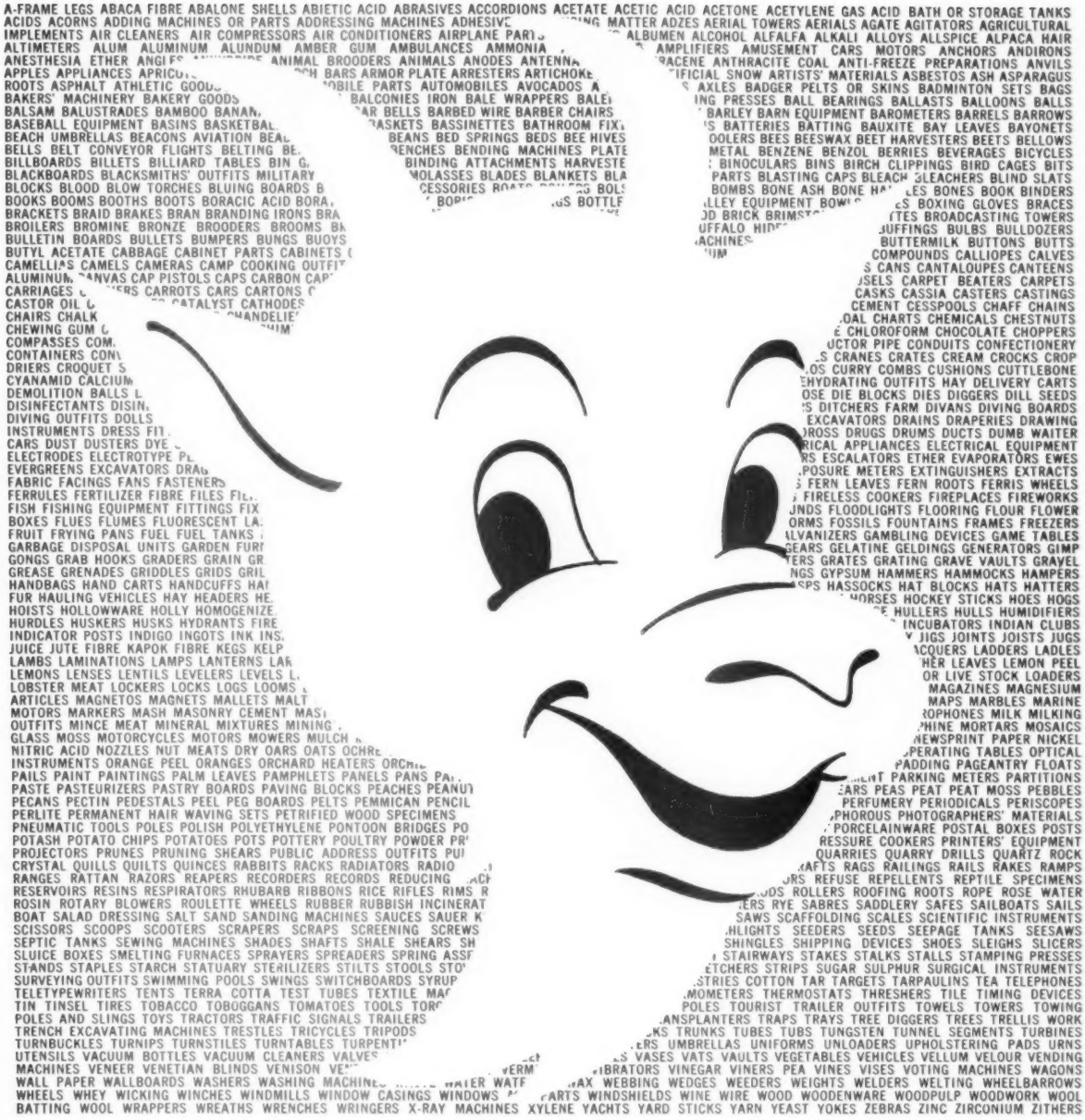
Danger of injury from freezing is reduced in carload shipments of lettuce by delaying the initial salting of ice until the first re-icing station. That is the conclusion of the Agricultural Marketing Service of the U.S. Department of Agriculture.

Marketing researchers in the Agricultural Marketing Service compared temperatures recorded in five paired-car shipments of lettuce. One car in each pair had the ice initially salted at the shipping point; the other car was initially salted at the first re-icing station.

Temperatures of the lettuce did not reach freezing in these tests, the researchers found. But in cars precooled to the desirable temperature (32 degrees F) and initially salted at the shipping point, the lettuce near the bottom bunker position of the cars was in danger of freezing and consequent damage while cars stood on tracks at shipping or assembly points.

Delaying the initial salting until the first re-icing station did not adversely affect the average temperature of the lettuce in transit, the researchers found. On this basis, the Agricultural Marketing Service recommends as a precautionary measure that salting be delayed until the first re-icing station is reached.

The lettuce-icing study is part of a program of continuing research designed to reduce costs of marketing farm products. The report, "Effects of Delayed Initial Salting on Transit Temperatures of California Lettuce Shipped by Rail," AMS-433, may be obtained, free, from the Division of Marketing Information, Agricultural Marketing Service, U.S. Department of Agriculture, Washington 25, D.C.


A-FRAME LEGS ABACA FIBRE ABALONE SHELLS ABIETIC ACID ABRASIVES ACCORDIONS ACETATE ACETIC ACID ACETONE ACETYLENE GAS ACID BATH OR STORAGE TANKS
ACIDS ACORNS ADDING MACHINES OR PARTS ADDRESSING MACHINES ADHESIVE
IMPLEMENTS AIR CLEANERS AIR COMPRESSORS AIR CONDITIONERS AIRPLANE PART
ALTIMETERS ALUM ALUMINUM ALUNDUM AMBER GUM AMBULANCES AMMONIA
ANESTHESIA ETHER ANGLE
APPLES APPLIANCES APRICO
ROOTS ASPHALT ATHLETIC GOOD
BAKERS' MACHINERY BAKERY GOODS
BALSAM BALUSTRADES BAMBOO BANA
BASEBALL EQUIPMENT BASINS BASKETBAL
BEACH UMBRELLAS BEACONS AVIATION BEA
BELLS BELT CONVEYOR FLIGHTS BELTING BE
BILLBOARDS BILLETS BILLIARD TABLES BIN G
BLACKBOARDS BLACKSMITHS' OUTFITS MILITARY
BLOCKS BLOOD BLOW TORCHES BLUING BOARDS B
BOOKS BOOMS BOOTHS BOOTS BORACIC ACID BORA
BRACKETS BRAID BRAKES BRAN BRANDING IRONS BRA
BROILERS BROMINE BRONZE BROODERS BROOMS B
BULLETIN BOARDS BULLETS BUMPERS BUNGS BUOYS
BUTYL ACETATE CABBAGE CABINET PARTS CABINETS
CAMELLIAS CAMELS CAMERAS CAMP COOKING OUTFI
ALUMINUM CANVAS CAP PISTOLS CAPS CARBON CAP
CARRIAGES
CASTOR OIL
CHAIRS CHALK
CHEWING GUM
COMPASSES COM
CONTAINERS CON
DRIERS CROQUET
CYANAMID CALCIUM
DEMOLITION BALLS
DISINFECTANTS DISIN
DIVING OUTFITS DOLLS
INSTRUMENTS DRESS FIT
CARS DUST DUSTERS DYE
ELECTRODES ELECTROTYPE PL
EVERGREENS EXCAVATORS DRA
FABRIC FACINGS FANS FASTENER
FERRULES FERTILIZER FIBRE FILES FIL
FISH FISHING EQUIPMENT FITTINGS FIX
BOXES FLUES FLUMES FLUORESCENT LA
FRUIT FRYING PANS FUEL FUEL TANKS
GARBAGE DISPOSAL UNITS GARDEN FUR
GONGS GRAB HOOKS GRADERS GRAIN GR
GREASE GRENADES GRIDDLES GRIDS GRIL
HANDBAGS HAND CARTS HANDCUFFS HA
FUR HAULING VEHICLES HAY HEADERS HE
HOISTS HOLLOWWARE HOLLY HOMOGENIZE
HURDLES HUSKERS HUSKS HYDRANTS FIRE
INDICATOR POSTS INDIGO INGOTS INK INS
JUICE JUTE FIBRE KAPOK FIBRE KEGS KELP
LAMBS LAMINATIONS LAMPS LANTERNS LA
LEMONS LENSES LENTILS LEVELERS LEVELS
LOBSTER MEAT LOCKERS LOCKS LOGS LOOMS
ARTICLES MAGNETOS MAGNETS MALLETS MALT
MOTORS MARKERS MASH MASONRY CEMENT MAS
OUTFITS MINCE MEAT MINERAL MIXTURES MINING
GLASS MOSS MOTORCYCLES MOTORS MOWERS MULCH
NITRIC ACID NOZZLES NUT MEATS DRY OARS OATS OCHRE
INSTRUMENTS ORANGE PEEL ORANGES ORCHARD HEATERS ORC
PAILS PAINT PAINTINGS PALM LEAVES PAMPHLETS PANELS PANS PA
PASTE PASTEURIZERS PASTRY BOARDS PAVING BLOCKS PEACHES PEANU
PECANS PECTIN PEDESTALS PEEL PEG BOARDS PELTS PEMMICAN PENCIL
PERLITE PERMANENT HAIR WAVING SETS PETRIFIED WOOD SPECIMENS
PNEUMATIC TOOLS POLES POLISH POLYETHYLENE PONTOON BRIDGES PO
POTASH POTATO CHIPS POTATOES POTS POTTERY POULTRY POWDER PR
PROJECTORS PRUNES PRUNING SHEARS PUBLIC ADDRESS OUTFITS PU
CRYSTAL QUILLS QUILTS QUINCES RABBITS RACKS RADIATORS RADIO
RANGES RATTAN RAZORS REAPERS RECORDERS RECORDS REDUCING
RESERVOIRS RESINS RESPIRATORS RHUBARB RIBBONS RICE RIFLES RIMS R
ROSIN ROTARY BLOWERS ROULETTE WHEELS RUBBER RUBBISH INCINERAT
BOAT SALAD DRESSING SALT SAND SANDING MACHINES SAUCES SAUER K
SCISSORS SCOOPS SCOOTERS SCRAPERS SCRAPS SCREENING SCREWS
SEPTIC TANKS SEWING MACHINES SHADES SHAFTS SHALE SHEARS SH
SLUICE BOXES SMELTING FURNACES SPRAYERS SPREADERS SPRING ASS
STANDS STAPLES STARCH STATUARY STERILIZERS STILTS STOOLS STO
SURVEYING OUTFITS SWIMMING POOLS SWINGS SWITCHBOARDS SYRUP
TELETYPEWRITERS TENTS TERRA COTTA TEST TUBES TEXTILE MA
TIN TINSEL TIRES TOBACCO TOBOGGANS TOMATOES TOOLS TOR
POLES AND SLINGS TOYS TRACTORS TRAFFIC SIGNALS TRAILERS
TRENCH EXCAVATING MACHINES TRESTLES TRICYCLES TRIPODS
TURNBUCKLES TURNIPS TURNSTILES TURNTABLES TURPENTI
UTENSILS VACUUM BOTTLES VACUUM CLEANERS VALVES
MACHINES VENEER VENETIAN BLINDS VENISON VE
WALL PAPER WALLBOARDS WASHERS WASHING MACHINE
WHEELS WHEY WICKING WINCHES WINDMILLS WINDOW CASINGS WINDOWS
BATTING WOOL WRAPPERS WREATHS WRENCHES WRINGERS X-RAY MACHINES XYLENE YACHTS YARD STICKS YARN YEAST YOKES ZEBRAS ZINC ZIRCONIUM ZITHERS

"It all goes great when it goes Great Northern"

From iron ore to ironing boards—A-frames to X-ray machines—take it from old Rocky, you've got it going on the *right track* with Great Northern **Coordinated Shipping Services.** Ship by freight car, truck or piggyback. Any one, any two, all three. Ship less-than-carload, trailerload or carload—you name it—we'll move it fast and dependably at a mighty advantageous rate.

Next time you're shipping or receiving goods, be sure to check out the GN brand of service. It sizzles. For information, write: G. D. Johnson, General Freight Traffic Manager, Great Northern Railway, St. Paul 1, Minnesota.

Business trip? Family vacation? Go great—across the scenic top of the nation—on Great Northern's **incomparable** Empire Builder.

Offices in principal cities of U. S. and Canada

GREAT NORTHERN RAILWAY

R E A EXPRESS IS ON THE MOVE WITH THE MOST COMPLETE SHIPPING SERVICE IN THE WORLD

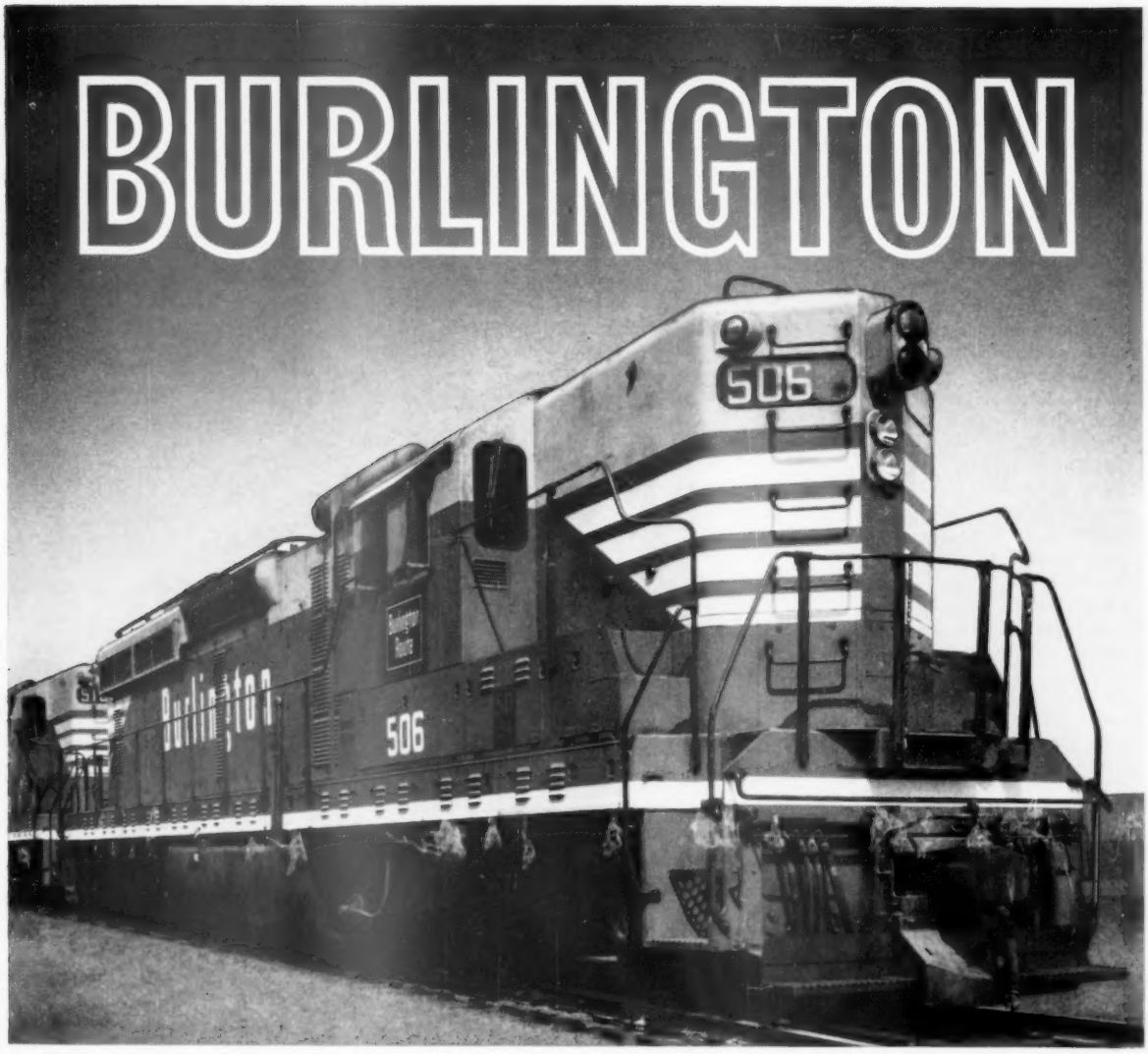
NOW R E A EXPRESS HAS NEW LOW RATES ON MANY COMMODITIES

(more coming!)

R E A Express smashes shipping charges! New facilities, improved services permit lowered costs on all these commodities. And the savings are passed on to you in solid, dollars-and-cents cuts to help you increase profits, slash shipping expense, meet competition. If you ship any of these commodities, check R E A Express first. You'll often find R E A charges lower than motor carrier. Call your local R E A office for specific information.

Books and Printed Matter
Shoes and Other Footwear
Wearing Apparel
Business and Office Machines and Accessories
Automobile, Truck or Trailer Parts
Hand Tools, Electric and Pneumatic
Curtains and Drapes
Sheets, Towels and Tablecloths
Piece Goods
Abrasives, viz: Cloth, Paper and Wheels
Farm Implements and Parts
Greeting Cards
Rugs and Carpets
Tufted Textile Products
Typewriters and Parts
Automatic Controls, Electric Switches, Meters, Thermostats
Casters
Sporting Goods
Drugs, Pharmaceuticals
Insecticides
Silver and Silver Alloys of Particular Manufacture
Razors and Razor Blades
Toilet Preparations
Office Equipment and Supplies
Bicycles, Children's Vehicles
Chains, Belting, Sprockets and Similar Items
Photographic Equipment and Supplies
Hand Tools other than Electric or Pneumatic
Builders' Hardware, Specialties and Related Articles
Biological Products
Laboratory Equipment
Surgical and Medical Instruments and Supplies
Fire Extinguishers and Parts
Pencils, Ball Point Pens and Related Articles
Manufactured Tobacco Products
Machinery and Machine Parts
Chewing Gum
Firearms and Ammunition

RAILWAY EXPRESS AGENCY®
HAS A NEW NAME
REA EXPRESS
TRUCK, PLANE, SHIP, TRAIN



Our growing nation has growing need for efficient railroad transportation. To supply this need, the Burlington is investing $22,250,000 in new locomotives and freight cars this year. This is the price of progress—a further expression of our confidence in the future.

H. C. MURPHY, President

Burlington Route

BURLINGTON LINES

(*Continued from page 13*)

ticipate car shortages, nine are already experiencing difficulties. While they constitute a relatively small proportion of the total number of respondents, they include some large companies whose comments may be of value to trend-watchers:

• Continuing shortage of Class A boxes is foreseen by S. F. Masman, Jr., traffic manager of Spencer Kellogg and Sons, Buffalo, N.Y. Another traffic manager who ships 25 cars a day (and who asks not to be quoted by name) also expects a shortage of Class A boxes.

• Kaiser Gypsum Co., Oakland, Calif., finds double-door, 50-ft boxes in short supply and doesn't look for the situation to improve, according to Lloyd W. Gragg, general traffic manager.

• Pittsburgh Plate Glass Co.'s manager of routing, Edward E. Chaney, expects a continuing shortage of cushion-underframe cars.

• A shortage of gondola cars is reported by W. J. Edmonds, general traffic manager, Granite City Steel Co., Granite City, Ill. He expects a deficit of both gondolas and hopper cars in the months ahead. ("With the retirement of old cars and the fact that new-car construction has been geared to specialized equipment," notes Mr. Edmonds, "we can't help but have a shortage of conventional cars.")

• A shortage of heavy-duty flats is reported by E. M. Burk, traffic manager of Wyatt Industries, Inc., Houston, Tex. "While we can usually secure them," says Mr. Burk, "quite often there is a costly delay."

• Also short of "special, heavy-duty depressed flats" is E. W. Bliss Co., Salem, Ohio, whose traffic manager, M. A. York, has this advice for railroads: "Much larger 'single' pieces (one piece not subject to disassembly, i.e. transformers, mill housings, etc.) are fabricated today; and we have just seen the beginning of this trend. . . . Wider steel must be rolled to meet the needs for the future and this requires overall larger equipment. . . . Industry is willing to work with the carrier on such problems. But the willingness of the carrier to meet the challenges must be made apparent."

The trend-watchers should also note, however, that there are a number of large companies that find car supplies entirely adequate. For example, E. I. du Pont de Nemours of Wilmington, Del., reports no present difficulties and anticipates no shortages except possibly in special-device cars. Among

Your nearby GraybaR railroad specialist

...can save you time in obtaining the railroad lighting equipment you want – the pole line supplies, communications equipment, electrical repair-shop supplies – anything electrical for railroads. ●At every strategic location listed here there's a Graybar railroad specialist ready to serve you. His prime concern is to keep abreast of the best in electrical equipment for railroads – for new construction, for maintenance or for emergencies. He's qualified to answer technical questions. He can talk prices He knows how to bring into action Graybar's nationwide network of suppliers and warehouses so that your work can proceed on schedule. Call your nearby Graybar railroad specialist – for day-to-day requirements or special projects. Graybar Electric Company, Inc., Executive Offices: Graybar Building, 420 Lexington Avenue, New York 17, N. Y.

ALABAMA
Birmingham 4—709 First Ave., N.
Fairfax 2-1861 • G. D. McClearn
Huntsville—124 Woodson St., N.W.
Jefferson 6-6651 • P.W. Thompson
Mobile—701 N. Joachim Street
Hemlock 2-3511 • R. L. Wear

ARIZONA
Phoenix—1700 N. 22nd Ave.
Alpine 2-2371 • J. F. Stone
Tucson—2021 E. Beverly Drive
622-6439 • E. M. Koehler

ARKANSAS
Little Rock—417 Boyd Street
Franklin 5-1246 • J. E. Smith

CALIFORNIA
Los Angeles 54—210 Anderson St.
Angelus 3-7282 • W. E. Guy,
J. M. Hammond, H. B. Volk
Sacramento 1—1900 14th Street
Hickory 4-8830 • W. C. White
San Bernardino—
655 South "H" St.
Turner 9-1051 • A. F. Stuart
San Francisco 1—1750 Alameda St.
Market 1-5131 • L. G. Hastings

COLORADO
Denver 4—104 Wazee Market
Tabor 5-7111 • H. E. Woodring

CONNECTICUT
Hamden—2460 State Street
Atwater 8-3811 • E. F. Berger

DISTRICT OF COLUMBIA
Washington 11—
5925 Blair Rd., N.W.
Randolph 3-9500 • W.E. Christmas

FLORIDA
Jacksonville 6—1563 Jessie Street
Elgin 6-7611 • A. C. Atkins,
H. T. Davidson, E. F. Olson,
R. W. Sylvester

GEORGIA
Atlanta 2—333 North Ave., N.W.
Jackson 3-1751 • W. E. Brown,
E. M. Heron
Columbus—1341 Eleventh Ave.
Fairfax 2-8866 • R. A. Hambley
Savannah—532 Indian St.
Adams 2-1121 • L. L. Black,
R. W. Hundley, E. E. Smith

ILLINOIS
Melrose Park—2045 N. Cornell Ave.
Fillmore 5-2400 • A. C. Schwager
Springfield—
405 N. MacArthur Blvd.
LA 8-0484 • A. R. Larson

INDIANA
Indianapolis—1300 W. 16th St.
Melrose 8-2351 • S. A. Sorenson

IOWA
Davenport—206 East 5th Street
323-2767 • J. J. Degree

KENTUCKY
Louisville 13—360 Farmington Ave.
Melrose 7-5411 • C. M. Resch

LOUISIANA
Shreveport—2536 Linwood Avenue
425-3271 • J. Kizer, G. C. Williams

MAINE
Portland 3—
Center & Commercial Sts.
Spruce 3-1766 • L. A. Arey,
S. C. Brown, E. F. Gillis

MARYLAND
Baltimore 5—
3701 E. Monument St.
Dickens 2-5500 • J. D. Rhoads

MASSACHUSETTS
Boston 18—345 Harrison Ave.
Hubbard 2-9320 • K. B. Mayer

MICHIGAN
Detroit 3—15045 Hamilton Avenue
Townsend 8-5550 • C. R. Carlson

MINNESOTA
Duluth 6—1730 West Michigan St.
Randolph 2-6685 • D. W. Nelson
St. Paul 2—362 Dayton Ave.
Midway 6-2631 • F. A. Sjogren

MISSOURI
Kansas City 8—
1644 Baltimore Ave.
Baltimore 1-1644 • J. F. Bower,
K. L. Schott
St. Louis 10—600 S. Taylor Ave.
Jefferson 1-4700 • D. E. Lang
Springfield—524 St. Louis St.
University 2-0587 • G. A. Griffin

NEBRASKA
Omaha 5—3626 Martha St.
346-7676 • W. E. Gilbert

NEW JERSEY
Newark 5—50 McWhorter Street
Market 2-5100 • R. Preuss

NEW YORK
Albany 4—40 Van Woert Street
Hobart 5-1563 • L. F. X. Brass
Buffalo 4—180 Perry Street
TL 4-3700 • S. E. Chadwick,
J. N. Asperger
New York City—
21-55 Bridge Plaza, N., L. I. City
Exeter 2-2000 • W J. Spencer,
R. W. Clark
Rochester 6—175 Dewey Ave.
Gladstone 8-3600 • H. W. Anderson
Syracuse 1—Deere Rd. &
Industrial Pkwy.
Hempstead 7-8333 • R. P. Reschke,
C. R. Vorgang

NORTH CAROLINA
Asheville—221 Patton Avenue
Alpine 3-4761 • D. M. Currence
Charlotte 1—1451 Bryant St.
Franklin 5-9831 • R. G. Carrington,
W. A. Mitchell, D. R. Swett
Rocky Mount—821 Planters Street
Gibson 2-5171 • J. G. Reid

OHIO
Cincinnati 10—
115 West McMicken Ave.
Main 1-0600 • L. J. Morrissey
Cleveland 3—1100 E. 55th Street
Henderson 2-2500 • W. Hamm
Dayton 1—332 W. Monument Ave.
Baldwin 4-5665 • W. G. Biddle
Youngstown 1—602 W. Rayen Ave.
Riverside 4-0122 • D. Dellmin,
A. P. Orlando

OKLAHOMA
Tulsa 4—2406 East 12th St.
Webster 6-2121 • T. R. La Rue

OREGON
Portland 8—N.E. 60th St. & Banfield
Atlantic 8-5661 • J. K. Keith

PENNSYLVANIA
Philadelphia 7—910 Cherry St.
Walnut 2-5405 • T. E. Laughlin
Pittsburgh 12—900 Ridge Ave.
Fairfax 3-0600 • J. D. Murray,
R. L. Scott, J. E. Emery,
W. V. Johnson, J. H. Phillips

SOUTH CAROLINA
Columbia—710 Lady St.
Alpine 2-2125 • R. B. Bulltman,
G. E. Payne
Greenville—302 W. Washington St.
Cedar 9-1338 • W. M. Hooks

TENNESSEE
Bristol—536 Anderson St.
South 4-7101 • J. C. Dunn,
C. Tomlinson
Chattanooga 4—
210 Highland Park Ave.
Madison 4-3351 • L. F. Cowan
Knoxville 1—1727 Grand Ave., S.W.
523-6171 — G. S. Kitts
Memphis 4—1474 Lamar Ave.
Broadway 4-7150 • J. H. Person III
Nashville—125 16th Ave., N.
Alpine 4-6501 • H. B. Hall

TEXAS
Abilene—1601 South Treadaway
Orchard 2-2861 • M. J. Moulton
Dallas 26—717 Latimer St.
Riverside 2-6451 • B. B. Agee,
T. H. Reynolds
El Paso—3513 Rosa St.
Keystone 2-3981 • H. L. Coldwell
Fort Worth 7—1107 Foch St.
Edison 5-4523 • W. E. Strader
Houston 3—1702 Cullen Blvd.
Capitol 8-4571 • L. W. Floyd,
J. M. Slavin

UTAH
Salt Lake City 16—
336 N. 3rd West St.
Elgin 9-8771 • A. L. Nelson,
R. H. Lee

VIRGINIA
Norfolk 8—1081 West 35th St.
Madison 5-7441 • C. C. Parkins,
A. A. Thompson
Richmond 19—10 S. 6th St.
Milton 4-3491 • J. R. Foster,
J. W. Horne, E. C. Toms

WASHINGTON
Seattle 4—1919 Sixth Ave., South
Mutual 2-0123 • E. C. McEachron
Spokane 1—W. 1033 Gardner Ave.
Fairfax 7-6611 • J. R. Lanyon
Tacoma 1—2112 A Street
Market 7-0164 • W. T. Fillinger,
W. R. Barker

Graybar offices and warehouses, many not listed here, total more than 130. All serve to back up the Graybar railroad specialist who is "at your service"!

100,000 electrical items are distributed throughout the nation... via Graybar offices and warehouses in over 130 principal cities.

Graybar

614

companies that anticipate no car-supply troubles at all are the Cream of Wheat Corp., Syracuse China, Mobil Oil Co., Alco Products, Inc., Patrick Cudahy, Inc., and Kaiser Steel.

Half a dozen respondents to the poll used the space reserved for "comments" to complain about the condition of cars they are receiving.

"Disgraceful," says R. E. Hinton, assistant traffic manager of Rose's 5-10-25 Stores, Henderson, N.C., of some of the cars he inspects. "I would estimate that 20% of all cars received [700 to 800 a year] should be out of service, in some shop being repaired."

"We had four bad-order cars in one month from the same railroad," reports Phillip T. Catalano, traffic manager of Steelcase, Inc., Grand Rapids, Mich. "Supply is adequate but condition of cars is very poor generally."

Another shipper whose car-supply problem is more qualitative than quantitative is John W. Eshelman and Sons, Lancaster, Pa., whose traffic manager, C. F. Witmyer, says: "It is often necessary to upgrade cars to cover needs."

"Lots of cars that are OK mechanically have rotten floors," says E. J. Davis, director of traffic, Caterpillar Tractor Co., Peoria, Ill. Merle D. Perry, general traffic manager, Screw and Bolt Corp. of America, Mt. Pleasant, Pa., finds that box cars and gondolas arrive needing inside repairs and "floors are full of holes."

Sun-Maid's Mr. Vawter reports that "many of the box cars that are now in service are in such condition that high-grade commodities such as our own dried fruits are subject to considerable damage if this equipment is used." He quotes another traffic manager as saying that he is "forced to reject a large number of box cars because of bowed ends."

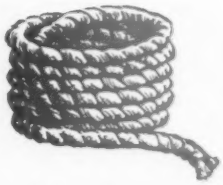
George Ferguson, traffic manager, Thompson Wire Co., Worcester, Mass., blames "humping" for the failure of box cars to arrive in good condition.

Along with the complaints there were a couple of compliments.

"Railroads are to be congratulated," says A. P. Gould, general traffic manager, Simonds Saw and Steel Co., Fitchburg, Mass., "for making special-device cars available. Without these cars we would be compelled to abandon rail shipments."

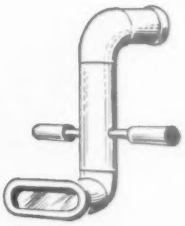
G. M. Clute, manager of traffic and distribution services, California and Hawaiian Sugar Refining Co., San Francisco, reports that Southern Pacific has responded to the need for upgrading tank cars: "Cars are being lined with paints compatible with as many liquid commodities as possible, including liquid sugar."

(Product reference No. 50A)



For shipping ropes

or soaps



or periscopes

The better way is Santa Fe

No matter what you ship call the nearest Santa Fe Traffic Office and let the "railroad that's always on the move toward a better way" go to work for you.

Santa Fe

Shippers' Guide

Chesapeake & Ohio

. . . LCL Changes

Has discontinued the following LCL direct cars: Cincinnati, Ohio, to ACL-Rocky Mount, N. C.; Ashland, Ky., to Saginaw, Mich.; Louisville, Ky., to Clifton Forge, Va.; Cincinnati, Ohio, to Huntington, W. Va.; Grand Rapids, Mich., to Erie-Lackawanna–Scranton, Pa.

Delaware & Hudson

. . . New Piggyback Service

Has extended its Binghamton, N.Y.—Mechanicville piggyback service to operate between Binghamton and Colonie Yard, Watervliet, N.Y.

Erie-Lackawanna

. . . New Piggyback Service

Appropriate tariffs have been amended to provide the following extensions in service: Plan III, Cleveland, Ohio to Louisville, Ky.; New York to Danville, Ill.; New York to Streator, Ill.; between Akron, Ohio and New York; New York to Trenton, Mich.; and New York, Scranton, Pa., Syracuse, N.Y., to Trenton, Mich.—Plan II, added routing to Detroit, Mich., via E-L to Lima, Ohio, and DT&I.

Illinois Central

. . . Calendar Extended

The pocket-size engagement calendar issued for the first half of 1961 (RA, Dec. 19/26, 1960, p. 43) is being reprinted to cover the final six months of the year.

New Haven

. . . More Plan II Piggyback

Has extended Plan II piggyback service to seven additional points in eastern Connecticut, including Jewett City, Chester, Haddam, and neighboring communities, and also Port Chester, N.Y.

Reading

. . . Freight Schedules Advanced

Moved its AJ-1 and AJ-12 fast freight schedules ahead, effective with daylight saving time, to meet shippers' and receivers' requirements in the metropolitan areas. The Reading, and its Alphabet route connections, are joining with C&O in providing TOFC service between Philadelphia, Reading, and Harrisburg, Pa., on the one hand, and the Grand Rapids area in Michigan, on the other.

Santa Fe

. . . Circular Reissued

Has reissued a circular detailing transloading procedures at Mahoney, Kans.

(Product reference No. 508)

$40,000,000

Union Tank Car Company

5% Sinking Fund Debentures

Dated June 1, 1961 Due August 1, 1986

Price 100%

(plus accrued interest)

This announcement constitutes neither an offer to sell nor a solicitation of an offer to buy these securities. The offering is made only by the Prospectus, copies of which may be obtained in any State from such of the undersigned as may lawfully offer these securities in such State.

Smith, Barney & Co. Incorporated — Blunt Ellis & Simmons

The First Boston Corporation — Blyth & Co., Inc.

Eastman Dillon, Union Securities & Co. — Glore, Forgan & Co.

Goldman, Sachs & Co. — Harriman Ripley & Co. Incorporated

Kidder, Peabody & Co. — Lazard Frères & Co.

Lehman Brothers — Merrill Lynch, Pierce, Fenner & Smith Incorporated

Stone & Webster Securities Corporation — White, Weld & Co.

June 9, 1961

"How can I cut over-all distribution costs?"

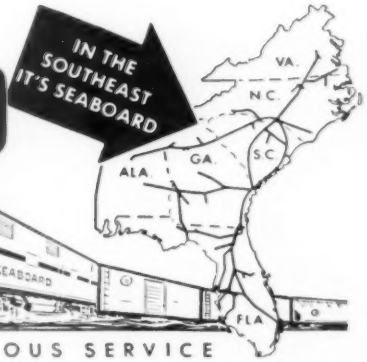
It's a timely question, and we may well have the answer.

How about *transportation?* Have you checked recently to see if Seaboard's modern freight facilities can reduce the tab you pick up on shipments in or out of your territory?

We like to figure with a sharp pencil, too. Let's talk over commodity, carload and multiple-car rates, specialized rail equipment, Piggyback. Get acquainted with *railroad dependability* and Seaboard's helpful, friendly service that *follows through* from first to last. Please call your nearest Seaboard representative.

Growing fast! Seaboard's Piggyback service in the Southeast and between North and South.

SEABOARD
AIR LINE
RAILROAD



THE ROUTE OF COURTEOUS SERVICE

RAILROADING AFTER HOURS WITH JIM LYNE

SOME FUN FOR A CHANGE—The most entertaining little club paper I've ever seen is "Jacksonville's Trafficlubman." The editor is one James W. Hinely, and he is a man of courage—when it comes to selecting the anecdotes and other humor he prints. His June 1961 issue will probably be a collector's item, for several of his jokes. Here's one of his more sedate observations: "A fine is a tax you pay for doing wrong. A tax is a fine you pay for doing okay."

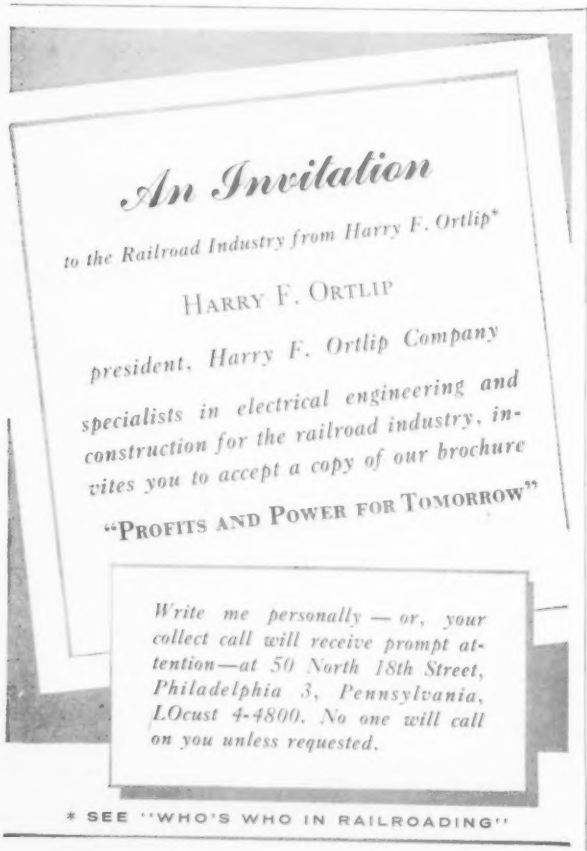
WHAT'S ALL THE FIGHTING FOR?—There's no idea about the railroad business that hits me harder or more often than this: That, somehow, the destructive wrangling between managements and unionists has got to stop.

Union leaders insist that railroads match wage increases and job security of businesses that are being spoon-fed out of the public treasury. This is, of course, completely impossible for a politically persecuted industry like the railroads.

Managements, at the same time, insist on the unrestricted right to lay employees off—this being the only means still open to avoid destruction.

These opinions are far apart, but I don't believe they're irreconcilable. Job security could be contrived for all competent employees, if railroads had the right to diversify into growing lines of business; if craft lines were not so rigid; and if employers would work with unions to train employees for job changes. Unions and managements, in cooperation, would have the political power to take some of the shackles off the railroads—allowing them to expand, so they'd be looking for help instead of cutting down.

Intra-family feuding is a luxury only the rich can afford. Poor folks, if they're smart, will learn to settle their differences by the frugal methods of peace.


An Invitation
to the Railroad Industry from Harry F. Ortlip*
HARRY F. ORTLIP
president, Harry F. Ortlip Company
specialists in electrical engineering and construction for the railroad industry, invites you to accept a copy of our brochure
"PROFITS AND POWER FOR TOMORROW"
Write me personally — or, your collect call will receive prompt attention—at 50 North 18th Street, Philadelphia 3, Pennsylvania, LOcust 4-4800. No one will call on you unless requested.
* SEE "WHO'S WHO IN RAILROADING"

'REGULATORY JUNGLE'—"It has been said that less regulation would occasion a return to the 'law of the jungle'—but the present situation may well be characterized as a regulatory jungle, in which is raging a battle of vested interests, rather than the public interest. Almost every new carrier effort to provide a service which is slightly different from routine is attacked as 'invasion,' 'unfair competition,' or 'destruction of the rate structure,' by someone who is afraid he will lose business he should not be handling; or which he hasn't earned the right to handle."

I found that statement in the text of a speech made not long ago by Dick Boyd of Pittsburgh Plate Glass. It is his explanation of why private transportation is growing at the expense of the common carriers. Efforts of water and truck lines to enact legislation for more stringent rate regulation (or to intimidate the ICC into more rigid limitation of competitive rates) aim to make even worse the sad situation Mr. Boyd describes.

Transportation needs nothing as much as it needs more big shippers who will speak out as Dick Boyd has done. As he says, the reformers (I suppose he had the Doyle Report in mind), are out after more regulation, when it is a lot less that is needed.

RAILROADS ROLLING IN WEALTH?—S. C. Phillips, VP of the BLF&E is an amiable man—but I'm afraid I must question his proficiency as a transportation economist. I've just seen a transcript of his appearance on a TV program. He quoted some figures purporting to show that railroads are quite profitable. The best available comparison of earnings of various industries (that compiled by the First National City Bank of N.Y.) shows railroads at the bottom of the list.

Mr. Phillips also said railroads "realize a margin on gross that is two or three times larger" than those of airlines and truck lines. This is a meaningless comparison. The reason is that railroads have to earn enough beyond their operating expenses to cover interest on their roadway and track, and airlines and truck operators have no such expense to pay. A truck operator is as prosperous at an operating ratio (expense to revenue) of 95%, as a railroad would be at around 70%. This situation was clearly explained in an article by Burlington President H. C. Murphy in RA of June 27, 1960.

'BOOM NOT GLOOM'—Sales VP Bill Flatow of West Disinfecting has circularized his staff, warning them against 'tough-time' peddlers. To reinforce his message of cheer to his sales staff Mr. Flatow is passing around 'Boom not Gloom' lapel pins.

I don't believe a depression can be corrected, alone, by using the right words. But they help; and the wrong words can do a lot of harm.

VAPOR TEFLON*-FACED CONDUIT GASKET

LASTS 2½ TO 3 TIMES LONGER

...provides positive, durable seal on Vapor Steam-Life Conduits

- unaffected by moisture
- face will not deteriorate
- virtually friction-free, permits free movement of conduit
- completely interchangeable with original conduit gaskets
- conforms exactly to taper of face ring

These tough, Teflon-faced gaskets have proved their durability in more than two years of rigorous testing on leading railroads. They're used in Vapor Steam-Life Metallic Conduits . . . the conduits that stay *on the car!*

Steam-Life Conduits with Teflon-faced gaskets can save you money. One man, one wrench, one gasket stops steam leaks in five minutes. Cars stay in service . . . carside maintenance costs are reduced up to 50% . . . set-outs and layovers are eliminated . . . parts inventories are smaller . . . everything designed to give you maximum cost-cutting benefits.

Write or call today for detailed information . . . ask for Bulletin No. 452-R

VAPOR HEATING CORPORATION
80 East Jackson Boulevard
Chicago 4, Illinois • WAbash 2-5160

VAPOR

*T.M. of Du Pont

Performance Proof No. 128

Duffy-Mott Relies on Enjoys 50% Reduction

P S
COMPARTMENTIZER
RAIL EXECUTIVES
This ad, appearing in shipper magazines, tells the story of advancements in lading protection offered by today's modern rail carriers.
GATE LOCKED CROSSWISE

LOADING: After moving Compartmentizer snug against bonded block load face, crewman easily engages four locks on each gate. This simple process saved Duffy-Mott dunnage costs and reduced loading time. Compartmentizers divide car into three adjustable areas, a real convenience for mixed-load and stop-off shipments.

Glass-packed food shipment goes coast to coast. Damage—one broken bottle.

Duffy-Mott Company, Inc., well known for quality food products, wants long distance shipments of Mott's Apple Sauce and Juice, Sunsweet Prune Juice, Clapp's Baby Foods and other products to arrive ready for grocers' shelves. To keep shipping damage to a minimum and avoid the inconvenience of filing damage claims, Duffy-Mott uses P-S Compartmentizers, and enjoys a 50% reduction in damage, as compared to shipments in conventional box cars.

For example: Duffy-Mott's Hamlin, N. Y., plant recently loaded 75,600 pounds of glass-packed apple sauce and apple juice into a Merchants Despatch P-S Compartmentizer-equipped, insulated box car, and sent it on a 2904 mile trip to their Pratt-Low Division Plant, Santa Clara, Cal. Traveling over four railroads, NYC, CB&Q, UP and SP, this shipment was subjected to all the customary effects of interchange, high speed train make-up, switching and movement. Unloading at Santa Clara revealed just one broken bottle. The other 29,879 jars and bottles were perfect!

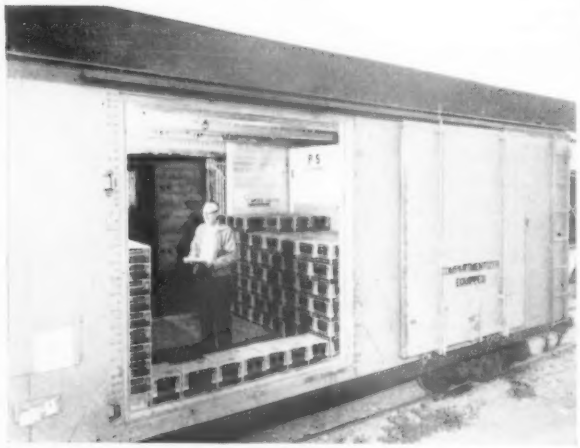
If your products are susceptible to damage, too, you owe it to yourself to get more information about extra protection during rail shipment. Write Pullman-Standard for full details on the P-S Compartmentizer.

ASK FOR THEM BY NAME . . .
COMPARTMENTIZER-EQUIPPED BOX CARS

The following shipper conscious carriers now have P-S Compartmentizer Cars in operation:

Atchison, Topeka & Santa Fe	New York Central
Baltimore & Ohio	Norfolk & Western
Bangor & Aroostook	North American Car Corp.
Central of Georgia	Northern Pacific
Chesapeake & Ohio	Pacific Fruit Express
Chicago, Burlington & Quincy	Pennsylvania
Chicago Great Western	St. Louis Southwestern
Chicago & North Western	Seaboard Air Line
Fruit Growers Express	Southern Pacific
Great Northern	Texas & Pacific
Merchants Despatch Transportation	Transport Leasing Company
Milwaukee Road	Union Pacific
Minneapolis & St. Louis	Western Pacific

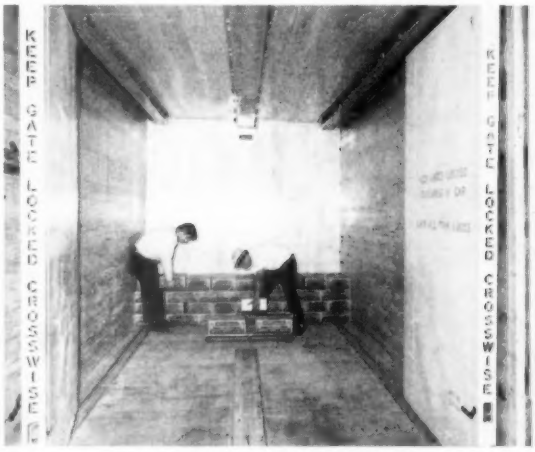
P-S Compartmentizers... in Lading Damage



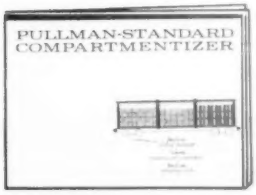
UNLOADING: J. J. Gianotti, Warehouse Superintendent, checks arrival condition of doorway load at Santa Clara, Cal. Said he, "One quart bottle was broken. There was no occasion to make a claim. Stacking patterns stayed neat, and there was no sawtoothing of load."

UNLOADING: P-S Compartmentizer gates swing back flush with car sidewalls, and though permanently installed can even be positioned outside the doorway. Here 280 A-end cases are shown, still in perfect line-up, 100% free of damage. Ready-for-the-shelf shipments like this protect customer good will.

UNLOADING: B-end cases being unloaded with pallet and lift-truck method. Compartmentizer gates provide no obstacle or hindrance to personnel or mechanical handling equipment. Orderly, no-damage condition of lading speeds unloading, and there are no bars or braces to replace after car is unloaded.



UNLOADING: Note clean, smooth, car floor and walls. No projections here to harm cases, no damaged interiors to be repaired, no mess of dunnage, strapping, ruined merchandise for cleanup and disposal. Compartmentizer-equipped car is immediately ready to carry and protect another shipment.



This brochure contains Compartmentizer details and specifications. Write for it today and find out how you can use this outstanding device.

PULLMAN-STANDARD

A DIVISION OF PULLMAN INCORPORATED

200 SOUTH MICHIGAN AVENUE, CHICAGO 4, ILLINOIS

BIRMINGHAM, PITTSBURGH, NEW YORK

J. C. FENNELLY CO., SAN FRANCISCO REPRESENTATIVE

You Can Double Your Reading Speed!

The "El Capitan" wouldn't run very far on narrow-gage tracks, and you won't get very far with increased demands on your reading time by using old habits. This second in a series of three articles will help you to acquire new reading skills to keep up with the ever-increasing load of "must" reading.

In the first article of this series (RA, June 19, p. 28), we discovered how fast you read and how this rate compares with the average reader. What about your other reading skills? Do you have any of these reading problems?

1. Are you conscious of hearing each word in your mind as you read?
2. Do you often have to re-read sentences, even paragraphs, for full comprehension?
3. Do you glance over each article from beginning to end before starting to read it?
4. Do you enjoy reading?
5. Do you always read the table of contents before you begin to read a publication thoroughly?
6. Do you often read part way through an article, decide it holds little interest for you, and go on to another?
7. Are you easily distracted when you read?
8. Do you read Railway Age (and other publications) systematically, covering each section in order of its importance to you?
9. Are you satisfied that you've understood and retained the important points of an article, even when you have read it all very rapidly?

As a skilled reader, your answers would be "No" to 1, 2, 6, and 7.

ARE YOU PHRASE READING?

We have already discussed the value of phrase reading and several techniques to help you acquire this new skill. It is the most important step to greater reading efficiency.

Another technique to help you acquire the phrase-reading habit is called "space reading." When you look directly at an object it is difficult to see the area around it. When you look slightly above it your eyes absorb much more of the surrounding area. This is also applicable to phrase reading. It is difficult to see a group of words by looking directly at the word in the center, but if you look slightly above the center word you can more easily see the surrounding words. Try this experiment. At first focus on the center of the phrase and then focus on the small x just above the phrase:

x x
The only way to increase reading speed
x
is by constant practice.

This is not an easy habit to acquire but do you see how easier it is to read in phrases by focusing your eyes just above the words?

As mentioned in the previous article, you may be conscious of moving your lips as you read, or of hearing the words in your mind's ear. If you have acquired the phrase-reading habit you are already becoming more dependent on seeing the words rather than saying or hearing them. The following exercise will help you determine if you still depend on hearing them:

Repeat aloud, over and over, until it becomes almost automatic, some nonsense chant, such as "one, two, three, four, one, two, three, four, one, two. . . ." Then begin to read while still chanting aloud. If you depend on hearing and saying the words you read, the print will seem meaningless.

To become a visual reader, keep up this "mumbling" practice. You will soon find you are able to direct your mind to what your eyes are reading while your voice and ears are busy with the chant. When this happens, you are on your way to real reading efficiency.

PUSHING AHEAD

It should be stressed that many people hesitate to use speed reading techniques for fear they will lose too much in comprehension. As a result, they make a half-hearted approach that only further frustrates their ambition to become skilled readers. To be sure, at first you will be thinking so much about the technique itself that your comprehension will drop. It might be compared to learning to type. At first your fingers are all thumbs. You are so busy concentrating on putting the right finger on the right key that the result is generally unreadable. After a little practice, the fingers strike the right keys without any conscious effort and you skim along worrying only about the content, not the process.

This applies to reading, though the skills described do not require nearly as much practice. It is important to push yourself up to maximum speeds. Naturally there is a limit, but good judgment will tell you when you are using a regular rhythm of phrase reading and when you are merely skip-jumping around with no semblance of order. Don't worry too much about comprehension at first. That will come in its own time. Actually, you will comprehend a lot more than you think you do. We have had students forced to read at 500 or 700 words per minute who claimed they didn't remember a thing. When questioned about various pertinent points in their reading they were amazed that they had understood more than they realized.

SELF PACING

Adjust your reading pace to the material at hand. Just as a car does not approach all speeds at the same

gear, you should not approach all reading material at the same rate. Practice setting your reading pace the same way you change gears in your car:

Low gear: Important and difficult new concepts in your field. Reading material you need, the terminology of which is strange to you.

High gear: Fairly routine articles in your own area of knowledge. Non-technical but important topical material. Departments in Railway Age (slowing into low if terminology becomes difficult).

Overdrive: Reviewing material already familiar to you. Fast glimpse of main ideas in an article. (Skipping and skimming.)

As you develop a smooth rhythm of phrase reading, also practice shifting gears, reading fast or slow depending on the material. Learning to adjust rapid'y to the nature of the material at hand will give you a greater feeling of control. The resulting efficiency will allow you to do all work with greater confidence.

A GOOD READING ENVIRONMENT

It seems almost pointless to mention this important element in acquiring good reading habits. Anyone knows he needs adequate lighting and becomes annoyed at being told anything so routine and trite. However, this factor alone can increase eye fatigue and ruin any other reading skills you may have. Choose a location for reading and research where there is little or no interruption.

The "Kennedy Rocker" may be fine for relaxation and comfort, but not for reading. Try for a compromise between relaxation and tension. A little tenseness helps you to stay alert. Finally, try to make your reading time and place the same each day. You will begin to associate the time and place with concentrated reading efforts.

In the next article we will concentrate on comprehension techniques. In the meantime, practice the speed techniques described. The resulting efficiency will amaze you.

READING KIT

A 64-page do-it-yourself book, which tells you the how, what and why of reading improvement with self gage to determine your reading rate, is available for $2 from Development Research Institute, Inc., Dept. R, 500 Fifth Avenue, New York 36, N.Y.

TRAVELIFT DIVISION of Drott Mfg. Corp., Sturgeon Bay, Wis., offers a new, fast, angle-unloading unit.

R. G. LeTOURNEAU Inc., Longview, Tex., has developed a 30-ton, diesel-electric lift truck for piggyback use.

New Ideas in Piggyback Stress Fast Unloading

New developments in piggyback handling devices are geared to fast—selective—loading and unloading of trailers at terminals.

Travelift's new model SPL 40ACW unit, shown in the New York Central yards at Chicago (top photo) has a variable drive that permits angular loading. This permits handling trailers in any order desired, without waiting for the complete unloading of the train. The unit handles trailers up to 80,000 lb and 40 ft length, as well as containers of a similar size.

LeTourneau's heavy-duty fork lift for piggyback unloading was demonstrated recently at Portland, Ore. (bottom photo). With a capacity of 30 tons, the unit can lift a 35-ft loaded trailer 20 ft in the air. The big lift unit is powered by a 275-hp diesel turning two generators. Power is transmitted through electric wheels driven from the generators.

Cab car (left) controls the locomotive at the far end of the train during "push" operation. Arrangement eliminates switching and makes possible faster turn-around.

Milwaukee Road President W. J. Quinn (left) and Edward J. Budd, president of Budd Co., inspect first of 40 bi-levels before it went into Chicago suburban service.

Milwaukee Begins Push-Pull

First Milwaukee Road push-pull commuter train left Chicago Union Station June 19, giving several hundred suburbanites a preview of the commuting comfort planned for all the road's 22,000 daily riders.

The stainless-steel, bi-level coaches making up the train are the first of 40 ordered last year from Budd at a cost of $7,000,000. All are to be in regular service shortly after Labor Day. Included in the order are eight cab cars and 32 trailers.

Each cab car will have an engineman's control station in a cab at one end of the upper level. This cab will be used during runs into Chicago when the locomotive will be pushing at the far end of the train. On outbound trips when the locomotive will be in the lead, it will be controlled from its own cab.

Each of the 13 diesel units to be assigned to the push-pull operation is to be equipped with an alternator powered by a 600-hp diesel engine. This will provide electric power for the lighting, heating, and air conditioning of all the cars in the train. Current will be supplied to the individual cars from trainlines which will extend from end to end of the train.

Cab cars seat 156 and trailers seat 162. Interiors feature vinyl-covered walls and ceilings, continuous fluorescent lighting on both levels, flip-over seats, and windows having graduated tinting so that shades are unnecessary. Wide parcel racks are located conveniently for riders on both levels. Vinyl tile floors can be easily and efficiently cleaned. Pneumatically operated sliding side doors permit fast, three-abreast entry and exit.

Arbitrators

► **The Story at a Glance: An arbitration board has rejected a Brotherhood of Locomotive Engineers' demand for extra pay to handle locomotives "on which the radio-telephone is operative and has the potential of being used." However, the arbitrators awarded a one-hour arbitrary for an engineer who is required to relay radio-received work instructions directed to another employee.**

The long simmering dispute between the Brotherhood of Locomotive Engineers and the Detroit, Toledo and Ironton over payment of extra compensation to engineers who handle radio-telephone-equipped locomotives has been settled. An arbitration board was convened to decide the issues after nearly four years of negotiations. The arbitrators, in an award handed down earlier this month, summarily denied the brotherhood demands, but directed DT&I to pay a one-hour arbitrary to engineers who pass on radio-received work instructions to other employees.

In ruling in this key case the board followed precedent established by an emergency board recommendation that such extra pay demands on Santa Fe were unjustified and should be withdrawn and a previous arbitration board decision that trainmen on the South Buffalo Railway were not entitled to a daily arbitrary for using radios or walkie-talkies.

But Roy E. Davidson, BLE grand chief engineer, doesn't think this decision shuts him out from progressing similar notices on other roads. "Although it is not all we expected," he said, "it is an award arrived at in arbitration which was mutually agreed to by the parties acting in good faith and is accepted by the BLE in that spirit."

In a Section 6 notice served on DT&I in August 1956, BLE had asked for four hours extra pay for engineers operating locomotives equipped with a radio-telephone. After agreeing to submit the dispute to arbitration, BLE's demands were scaled down to only a 45-minute arbitrary. The payments were to be retroactive to Nov. 1, 1959 and were for handling locomotives "on which the radio-telephone is operative and has the potential of being used." All DT&I locomotives were equipped with a radio-telephone at this time and the engineers wanted the payment whether they had to use the communications aid or not.

Arguing that use of the radio-telephone did not justify any extra com-

Scale Down BLE Radio Demand

pensation, DT&I told the board:

- The prevailing practice in the industry is not to pay anything more for the use of the radio-telephone.
- There are no substantial differences in skill, responsibility, work load or working conditions in the engineer's position.
- The use of the radio-telephone did not benefit DT&I through increased productivity.

In handing down its award, the board disputed DT&I's denial that the radio-telephone had benefited the railroad by increasing productivity, but didn't think this justified extra pay for engineers.

Here is what the board said on this point:

"The use of radio-telephone does contribute to the faster and safer operation of road trains in particular and also, although to a lesser extent, of yard operations. However, we are not prepared to say that such benefit to the carrier through use of the radio-telephone constitutes a justification for additional compensation to the engineers."

The board had this to say about the brotherhood assertion that the radio-telephone had changed the job content and added to the work load of the engineer:

"The engineer has the same responsibility for safe and efficient operation of his engine as before. The receipt and transmission of information and instructions relative to this basic responsibility has always been a part of his duties."

Does the use of the radio-telephone add to the mental stress of the engineer? The arbitrators don't think so. "There is a certain amount of added annoyance in having to hear the noise of the radio speaker. However, there is also greater safety and security, easier handling of trains and less exposure to bad weather with the use of the radio-telephone."

While the board denied BLE's request in its entirety, it did make one exception which may leave its decision open to further interpretation. A one-hour arbitrary allowance was directed for any day that an engineer "is required to receive via radio-telephone from supervisory personnel, work orders or work instructions directed to another employee, and to relay such work orders or work instructions to the employee concerned."

BLE has radio-telephone notices pending on a number of lines including one on the Santa Fe that was argued before an emergency board last year. The board recommended that the Brotherhood "withdraw forthwith its demands for an arbitrary payment to engineers operating locomotives equipped with a radio telephone" (RA, July 25, 1960, p. 67). These demands have been held in abeyance awaiting the outcome of the key DT&I decision.

Traffic Trend Is Up

Carloadings during the third quarter of this year should total about 7.9 million, a change—for the better—of about 4% from traffic during the corresponding months of 1960. While loadings generally, so far this year, are running well behind those of 1960, traffic in recent weeks, when compared with the same week a year ago, is off only a little. Grain and grain products, in fact, are running slightly ahead of last year, while coke and forest products are at almost the same level as they were a year ago. Piggyback, of course, is up about 3% for the year to date. The happy fact of the moment is that while the trend was down a year ago, it's up today.

With three weeks of carloadings figures still to be published for the second quarter, it looks as if the total for that period will come to about 7,250,000. As of June 10 the total already was about 5.5 million with loadings currently running at a rate of just under 600,000 per week.

It seems that just about everyone now is convinced that the recession is over. True, there still are some pretty soft spots in the economy. Housing starts, for example, haven't been behaving quite as they did in revivals following previous postwar recessions. In our opinion this is due more to the timing of events rather than to any real weakness in the housing market itself. We still believe that in 1961 the third quarter will be the big quarter for housing starts, instead of the usual second quarter. This is not to say that housing starts in 1961 will set any records. But as potential home buyers become convinced that the recession is over they'll be back in the market. Indications are that in unprecedented numbers they're out looking at the builders' models on display.

Unemployment still is high. However, that's not exactly new at this stage in recovery. But the length of the average factory work week is on the upward trend, and the number of employed persons is rising. Consumer income is climbing—the increase in May was the second consecutive monthly upward movement. At the moment, business expansion plans—in terms of new plant and equipment—show no signs of anything upcoming that will measurably affect production favorably this year. (However, defense spending is on the rise as something of an offsetting factor.) One might cautiously guess that business expansion plans will take a mild upward swing during the last quarter of the year as output and capacity come closer to being in balance in more industries.

While carloadings are — and should continue — on the upgrade throughout the rest of the year, barring any serious labor stoppages in major industries, this still will be one of the worst years in recent history for the railroads. This has been reflected, of course, in the carriers' buying of operating supplies and new equipment. While carloadings for the year to date are down about 15% compared with 1960, so are purchases. As traffic continues to increase not only will purchases of materials, supplies and fuel increase substantially, but orders for new equipment may be expected to rise. The gap between purchases in 1960 and 1961 to date will be narrowed and by the end of the year should be erased almost completely. Thus, purchases, excluding capital expenditures, should total about $1.4-$1.5 billion. Going into the new year of 1962 the picture should be considerably brighter than it has been for some time for the railroads and their suppliers.

J. W. Milliken
Director of Research
Simmons-Boardman

C&O-NYC CONTEST FOR B&O DRAWS BIG CROWDS (*Continued from page 15*)

ceived by them and the C&O dividends they would be entitled to under the exchange offer and to pay these dividends if the control application is approved.

As to coordinations to effect savings, Mr. Tuohy wants to work out such arrangements on a cooperative basis with Central. Prospective savings from such arrangements "are far greater than any revenue that C&O and B&O could conceivably obtain by a campaign to divert NYC traffic," the C&O president said, adding: "We would not, of course, want to jeopardize these savings by diverting a few cars of traffic and thus possibly alienate the Central."

Debt Structure Cited

Commenting on Central's bid for inclusion in the proposed B&O-C&O affiliation, Mr. Tuohy referred to Central's "huge" and "complex" debt structure. "Assumption by C&O of Central's debt," he added, "would result in windfalls to speculators and in drastic degradation of C&O securities." Moreover, C&O stockholders have indicated that they would not approve inclusion of Central, and Mr. Tuohy believes B&O stockholders "would just as strongly oppose an affiliation with Central."

In closing, Mr. Tuohy called the proposed control a commercial transaction "of the type on which our free enterprise is based, where the parties have come to an understanding, with no substitution of government decree for managerial and stockholder judgment." The railroad industry generally "is in favor of this constructive approach," and "realizes that its failure will set back the merger movement many, many years—probably a decade," the C&O president concluded.

The B&O's supporting presentation got under way with the testimony of its chairman and chief executive officer, Howard E. Simpson, who said his road is in immediate need of the financial assistance which has been offered by C&O. Endorsing the C&O proposal without reservation, Mr. Simpson opposed NYC's competing application for control of his road.

In the course of his testimony, the B&O chairman told of merger discussions of recent years. He said the merger studies announced by Central and the Pennsylvania in November 1957 forced other major eastern lines to consider what protective action might be taken to meet this competitive threat.

His first discussion of the matter with Mr. Tuohy was an informal talk in January 1958, Mr. Simpson said. Shortly afterward, the B&O chairman talked with Lynne White, formerly chief executive officer of the Nickel Plate, regarding a possible B&O merger with that road. Also, the prospect of a Central-PRR merger was discussed at two late-1958 meetings of representatives of the C&O, B&O, NKP, Erie, Lackawanna, Reading and Delaware & Hudson.

All of these meetings involved only "informal" exchanges of views, Mr. Simpson said. And the Central-PRR merger studies were terminated early in 1959.

Discussions which culminated in the present C&O proposal, and B&O support thereof, began in the spring of 1960, Mr. Simpson said. He recalled that on June 14, 1960, C&O made an exchange offer to B&O stockholders which had the concurrence of B&O's management and board of directors. He also recalled Central's competitive offer which came about a week later. The B&O's immediate reaction was to take a neutral position as between the two offers.

Subsequently, after C&O advised that it could not make a merger commitment, B&O accepted a Central proposal to undertake merger studies. Thereafter, C&O agreed to follow through from acquisition-of-control "to consummate a merger of the two companies as soon as practicable." Then, the B&O directors adopted a resolution favoring the C&O control plan as a first step toward merger. That resolution, adopted Jan. 12, 1961, was concurred in by C&O.

Delay Explained

As to why B&O waited so long to make up its mind, Mr. Simpson had this explanation:

"In the first place, as the B&O situation continued to deteriorate in the last half of 1960 . . . the advantages of C&O unification became more apparent, and, in fact, undeniable. In other words, while the value of C&O help was to be recognized in the early summer of 1960 . . . that help became vastly more important as time went on and B&O's revenues continued to decline.

"Secondly, what attraction the Central had for B&O was not found in its offer to B&O stockholders, but rather in the fact that Central's interest contemplated an immediate merger. . . . For the B&O, merger was a much more agreeable form of unification than control by another line, and in our conversations with C&O representatives during this time, we made no secret of this preference. In fact, had C&O been in a position (at the time of the Central intervention in early July of 1960) to agree upon merger terms, the B&O would have been in a position from the beginning to oppose the Central.

"Accordingly, when on Jan. 12, 1961, the C&O acknowledged that its application in the present proceeding was an intermediate step to merger, the principal attraction in unification with Central was eliminated. . . . There was no remaining question on the part of B&O management as to its choice between C&O and Central. The clear, and indeed inevitable, choice of B&O was C&O."

Mr. Simpson was followed in the witness chair by William Wyer, president of Wyer, Dick & Co., who put into the record a report made by his firm on the economics of the proposed control. Five years of coordinated C&O-B&O operations would bring cumulative savings of $65,704,210, Mr. Wyer estimated. He put the cash requirements needed to accomplish these coordinated savings at $20.3 million.

Consolidation Savings Listed

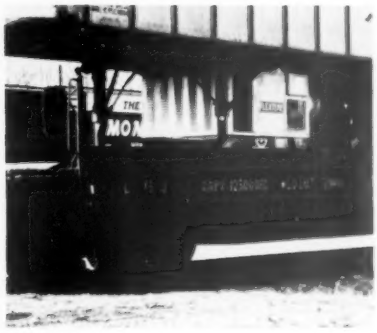
The principal item in the latter is $14.7 million for consolidation of stations and terminals, including $13.5 million for a new automatic yard at Cincinnati. Six million dollars is the estimated cost of protecting employees against monetary loss that could result from job changes.

Mr. Wyer said that annual savings of $9.7 million could be accomplished by consolidating stations and terminals, including those at Cincinnati, Chicago and Toledo. He put at $2.3 million the prospective annual savings from consolidation of various offices. And he said an average of $3.7 million could be saved by pooling freight cars and locomotives. Also among the projected savings, was $650,000 a year to result from combining C&O and B&O train service between Fostoria, Ohio, and Detroit.

Each section of his report, Mr. Wyer said, was reviewed by a committee composed of himself, B&O and C&O officers and a representative of Robert Heller & Associates, management consultants. These reviews resulted in some changes from the original version, so "every proposal as now presented was concurred in by the entire committee."

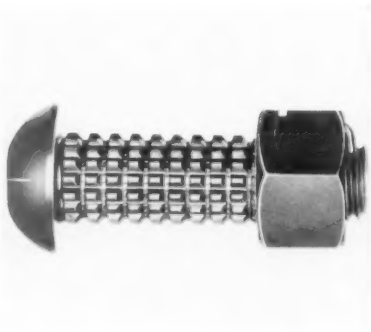
Among various interveners in the cases are the states of Virginia and West Virginia, both C&O supporters. Governors Almond of Virginia and Barron of West Virginia were among witnesses at last week's sessions of the hearing.

NEW PRODUCTS REPORT



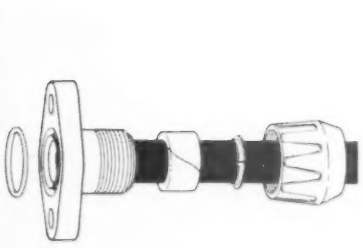
Piggyback Reefer Unit (RA-1)

The Flextemp piggyback reefer unit, a modified version of the Flextemp over-the-road trailer unit, weighs 1,042 lb, installed. With both twin independent refrigeration systems operating, a temperature of 0 deg F, or below, is guaranteed in a 40-ft trailer with 4 in. of styrafoam insulation or equivalent. With one system inoperative, temperature will hold at 15 deg F. The piggyback unit has a 7-ft oil reservoir and a 75-gallon fuel tank. *Flextemp Corp.*



High-Tensile Bolt (RA-2)

High clamping force and a body-binding fit in a bearing joint are features of a high-tensile interference-body bearing bolt having rolled interrupted ribs. The bolt is designed with proper length of rib for thickness of plates, thus preventing the riding of any steel on bolt threads. Because of its flat head and taper at start of ribs, bolt can be driven in misalined holes with a 3-lb hammer, or pulled in with nut. *Automatic Nut Co.*



Pipe Fitting (RA-3)

A positive seal, regardless of temperature variations from -50 to 200 deg F, is said to be obtained from the Gripseal air brake pipe fitting. The land and groove design on the surface of the compression nut gives extra wrench clearance and permits use of open-end or pipe wrench when servicing. Fittings are available in all standard sizes for freight and passenger cars and locomotives. *New York Air Brake Co.*

Now—A Faster Way To Make Inquiries

Want added information on products advertised or described in this issue? It's easy to get.

Note advertising page numbers or code numbers in New Product headlines. Circle corresponding numbers on card at right. Detach and mail.

RAILWAY AGE WEEKLY

PLEASE SEND ADDITIONAL INFORMATION RELATING TO PRODUCTS ADVERTISED ON PAGES 2 3 4 6 8 11 12 15 16-17 18-19 22 23 24 25 27 28-29 33 34 35 36-37 38-39 40-41 42 43 45 46 47 48-49 50A 50B 51 52 53 54-55 65 67 71 72

PLEASE SEND ADDITIONAL INFORMATION RELATING TO PRODUCTS DESCRIBED ON PAGES 61 and 62 MARKED
RA-1 RA-2 RA-3 RA-4 RA-5 RA-6 RA-7

NAME ..... TITLE .....

COMPANY .....

ADDRESS .....

CITY ..... ZONE..... STATE.....

6 26 61

FIRST CLASS PERMIT NO. 153 N.Y.

BUSINESS REPLY MAIL
NO POSTAGE NECESSARY IF MAILED IN U. S.

POSTAGE WILL BE PAID BY

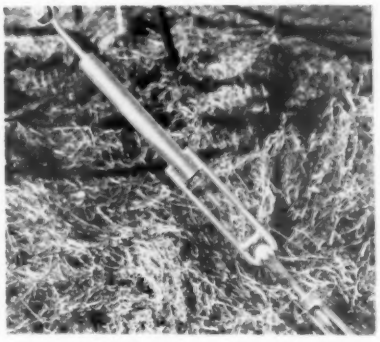
RAILWAY AGE WEEKLY
30 CHURCH ST.
NEW YORK 7, N. Y.

READERS' SERVICE DEPT. (Attention George Johnson)

NEW PRODUCTS REPORT

New Crawler Tractor (RA-4)

The new TD-15 (151 series) intermediate tractor is powered by a self-starting, six-cylinder D-554 diesel engine developing 105 engine horsepower at 1,650 rpm. Drawbar horsepower is 85 with the unit having a 23,750-lb maximum drawbar pull with adequate weight and traction. A full reverse transmission furnishes six speeds forward and reverse. *International Harvester Co.*

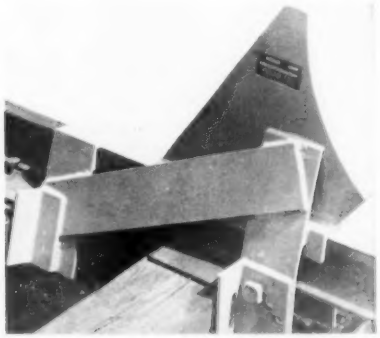


Automatic Guy Tension (RA-5)

An automatic guy tensioning device is said to quickly, easily and economically provide the required initial guy tension and to maintain the proper tension. The device has a positive means of determining guy tension by direct reading. Three automatic devices cover a range of guy sizes from 3/8 in. to 1 in., with initial guy tension ranges from 800 to 4,500 lb. *Tower Construction Co.*

Rail Brace (RA-6)

The Racor Security adjustable rail brace now is available in a one-bolt version. The new brace has a 1-in. bolt which can be inserted from the top of the plate for easy installation. This location of the bolt also simplifies adjustment or removal. The standard two-bolt brace has been redesigned with a slotted plate to permit bolts to be installed from the top. *American Brake Shoe Company.*



Cushioned Car Stop (RA-7)

A new car stop is available for 60- to 140-lb rail sections. Known as the Model CCS-1 cushioned car stop, it uses the ballast in front of two ties to stop moving cars. The force of the cars is transferred to the ties through arms which extend from the wheel contact plate to the side of the ties. The shape of the plate has been designed so that no overturning force exists. *The Nolan Company.*

BUSINESS REPLY MAIL
NO POSTAGE NECESSARY IF MAILED IN U. S.

POSTAGE WILL BE PAID BY

RAILWAY AGE WEEKLY
30 CHURCH ST.
NEW YORK 7, N. Y.

READERS' SERVICE DEPT. (Attention George Johnson)

FIRST CLASS
PERMIT NO. 153 N.Y.

RAILWAY AGE WEEKLY

PLEASE SEND ADDITIONAL INFORMATION RELATING TO PRODUCTS ADVERTISED ON PAGES 2 3 4 6 8 11 12 15 16-17 18-19 22 23 24 25 27 28-29 33 34 35 36 37 38-39 40-41 42 43 45 46 47 48-49 50A 50B 51 52 53 54-55 65 67 71 72

PLEASE SEND ADDITIONAL INFORMATION RELATING TO PRODUCTS DESCRIBED ON PAGES 61 and 62 MARKED
RA-1 RA-2 RA-3 RA-4 RA-5 RA-6 RA-7

NAME ..... TITLE .....
COMPANY .....
ADDRESS .....
CITY ..... ZONE ..... STATE .....

6/26/61

Market Outlook

Carloadings Rise 1.5% Above Previous Week's

Loadings of revenue freight in the week ended June 17 totaled 602,153 cars, the Association of American Railroads announced on June 22. This was an increase of 8,849 cars, or 1.5%, compared with the previous week; a decrease of 47,350 cars, or 7.3%, compared with the corresponding week last year; and a decrease of 122,125 cars, or 16.9%, compared with the equivalent 1959 week.

Loadings of revenue freight for the week ended June 10 totaled 593,304 cars; the summary, compiled by the Car Service Division, AAR, follows:

REVENUE FREIGHT CARLOADINGS
For the week ended Saturday, June 10

District	1961	1960	1959
Eastern	83,908	91,763	103,776
Allegheny	97,245	112,991	134,084
Pocahontas	54,483	58,596	60,481
Southern	111,480	115,347	114,079
Northwestern	87,574	105,573	114,935
Central Western	110,703	113,460	128,405
Southwestern	47,911	50,928	54,081
Total Western Districts	246,188	269,961	297,421
Total All Roads	593,304	648,658	709,841
Commodities:			
Grain and grain products	52,085	49,189	57,433
Livestock	3,273	3,964	3,610
Coal	109,497	116,680	121,059
Coke	6,961	7,216	11,198
Forest Products	39,078	40,040	40,423
Ore	48,123	73,685	81,620
Merchandise l.c.l.	28,866	35,905	40,637
Miscellaneous	305,421	321,979	353,861
June 10	593,304	648,658	709,841
June 3	531,267	574,980	680,617
May 27	578,767	639,864	687,063
May 20	568,457	636,853	686,152
May 13	551,405	640,005	692,996
Cumulative total, 23 weeks	11,856,035	13,851,057	14,272,211

PIGGYBACK CARLOADINGS.—U. S. piggyback loadings for the week ended June 10 totaled 12,609 cars, compared with 11,239 for the corresponding 1960 week. Loadings for 1961 up to June 10 totaled 249,964 cars, compared with 242,310 for the corresponding period of 1960.

IN CANADA.—Carloadings for seven-day period ended June 7 totaled 74,590 cars, compared with 103,631 for the previous ten-day period, according to the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada		
June 7, 1961	74,590	23,640
June 7, 1960	77,953	26,199
Cumulative Totals		
June 7, 1961	1,396,288	553,125
June 7, 1960	1,532,597	649,214

New Equipment

FREIGHT-TRAIN CARS

► *Fruit Growers Express.*—Ordered 210 bunkerless refrigerator cars from its Alexandria shops for delivery beginning in September. Order includes 90 50-ton, 40-ft cars and 120 70-ton, 50-ft cars.

► *General American.*—Will build 29 additional 30,300-gal. tank cars at its Sharon, Pa., plant (RA, June 12, p. 39). The order includes 10 for Wanda Petroleum; 10 for Union Petroleum; 5 for Cities Service; and 4 for Signal Oil.

► *Grand Trunk Western.*—Ordered 200 50½-ft double-door box cars from ACF for September delivery.

► *Union Tank Car.*—Ordered 125 tank cars ranging from 10,000 to 30,000 gal. capacity from its Whiting, Ind., shops.

PIGGYBACK

► *Santa Fe.*—Ordered 100 85-ft roller-bearing-equipped flat cars from General American and 150 40-ft refrigerator trailers from Fruehauf (for use by Santa Fe Trail Transportation Co.). The trailers, equipped with Worthington Corp. refrigeration units, and 75 of the flat cars will be used to transport fresh fruits and vegetables from California and Arizona to the Midwest. The remaining 25 flats will be equipped with multi-level auto racks. All of the equipment is scheduled for delivery during the next two months.

LOCOMOTIVES

► *Brazilian Ministry of Transport and Public Works.*—Ordered 180 locomotives from General Electric at a cost of $23.5 million. Order includes 108 U5B 600-hp diesel-electric units, 65 U8B 900-hp diesel-electric units and 7 3,000-hp all-electric units. The locomotive order was described by G-E sources as the largest ever placed by a national railroad administration.

Orders & Deliveries

► *Orders Increase.*—Orders were placed in May for 3,666 freight cars, compared with 2,040 in April. May 1960 orders totalled 2,209. Deliveries in May totalled 3,360, compared with 2,933 in April and 5,931 in May 1960. The backlog of cars on order and undelivered as of June 1, 1961, was 13,964, compared with 13,658 on May 1 and 36,106 on June 1, 1960.

TYPE	ORDERED May, 1961	DELIVERED May, 1961	UNDELIVERED June 1, 1961
Box—Plain	1,500	1,010	3,927
Flat	514	494	1,179
Gondola	1	356	1,973
Hopper	340	595	3,613
Cov. Hopper	272	353	579
Refrigerator	810	301	1,616
Tank	215	242	765
Caboose	0	8	201
Other	14	1	111
TOTAL	3,666	3,360	13,964
Car Builders	2,030	1,588	4,338
Railroad Shops	1,636	1,772	9,626

Unionists Can Get 'Political' Refunds

Railroad employees working under union-shop arrangements can obtain refund of any part of compulsorily-collected union dues which is used for political purposes. The United States Supreme Court has so ruled, but the refund procedure which it outlined is somewhat cumbersome.

The decision was in a case brought by six employees of the Southern who challenged a union-shop agreement made pursuant to the 1951 amendment to the Railway Labor Act. That amendment authorized such agreements, which the act had previously prohibited. Constitutionality of the amendment was not in issue, the court having cleared it in a previous case.

The Southern employees won in Georgia courts, and interested unions appealed to the Supreme Court. The case was docketed there as International Association of Machinists, et al v. S. B. Street, et al.

The court's majority opinion, by Justice Brennan, was accompanied by four separate expressions. They were dissents by Justice Black and by Justice Frankfurter, with whom Justice Harlan agreed; a concurring opinion by Justice Douglas; and Justice Whittaker's opinion, "concurring in part and dissenting in part."

The decision was narrow, holding that only those who registered objection to use of their dues for political purposes were eligible for refunds. The court said:

"The safeguards [in the union-shop amendment] were added for the protection of dissenters' interest, but dissent is not to be presumed—it must affirmatively be made known to the union by the dissenting employee. The union receiving money exacted from an employee under a union-shop agreement should not in fairness be subjected to sanctions in favor of an employee who makes no complaint . . ."

In sending the case back to the Georgia courts, the Supreme Court suggested that a way to remedy the situation would be to set up arrangements for restitution to an individual employee of that part of his money which a union expended, despite his notification, for the political causes to which he had advised the union he was opposed. The court added:

"There should be no necessity, however, for the employee to trace his money up to and including its expenditure; if the money goes into the general funds and no separate accounts of receipts and expenditures of the funds of individual employees are maintained, the portion of his money the employee would be entitled to recover would be in the same proportion that the expenditures for political purposes which he had advised the union he disapproved bore to the total union budget."

Welcome to the Club!

Just recently, two brand new traffic magazines have been announced. Watson Publications, publishers of Modern Railroads, will launch "Traffic Management" beginning in January 1962. Traffic Service Corporation, publishers of Traffic World, have announced "Transportation and Distribution Management" to commence publication in October this year.

At Simmons-Boardman, the important role of the industrial traffic manager in transportation life has long been recognized. Since September 1958, we have published monthly Freight Traffic issues of Railway Age. These Freight Traffic issues —like this one—appear on the last Monday of each month. In most respects—news, departments, columns, service pages, etc.—the Freight Traffic issues are like any other weekly Railway Age. But there are additional departments and features aimed at traffic men, both the railroader and his industrial counterpart.

The Freight Traffic issues grew out of recognition of the expanding community of interest between railroad men and their customers—the industrial traffic managers. As monthly features in a weekly magazine, they required special ground rules.

As a weekly, Railway Age has both the opportunity and the responsibility to present railroad news while it's still fresh, at the time it's happening. This applies to traffic news, of course, as well as to everything else in our industry.

This means that an important traffic story—like REA's new cube rates —is covered when it happens. The tariff went into effect June 7. We carried a full account as our lead news story on June 12.

It doesn't mean that the story is excluded from our Freight Traffic issue. "Case History of a Rate: How REA's Cube Rate Was Born" on p. 30 of this issue picks up where our news story left off. It goes behind the facts to get at the significant details in the background—the how and why of the rate. (A significant detail of this story was that the new tariff was a direct result of an earlier Railway Age Freight Traffic story: "China Maker Needs Low Rates" in our Feb. 27 issue.)

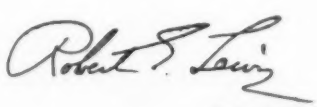
Our Freight Traffic issues have been extremely successful—with the industrial traffic manager, himself, the prime factor in their success. The TM's have participated in shipper polls; they have contributed signed features; they have cooperated in providing material for articles describing their operations; they have written to tell us how we could help them. Many have found it worth while to supplement our Freight Traffic issues with a full subscription that brings them all the regular weekly issues.

Railway Age has long been a pioneer in promoting better marketing concepts in the railroad industry. Scores of editorials have been published on the need for pricing that is designed to make traffic move by rail. The concept of incentive rate making is now widely understood by all levels of railway management largely as a result of Railway Age's editorial crusading in these areas.

Similarly, our Freight Traffic issues are a demonstration that railroad transportation is effective. The issues focus sharply on improvements and new services. Railway Age is committed to the promotion of "ship by rail!"

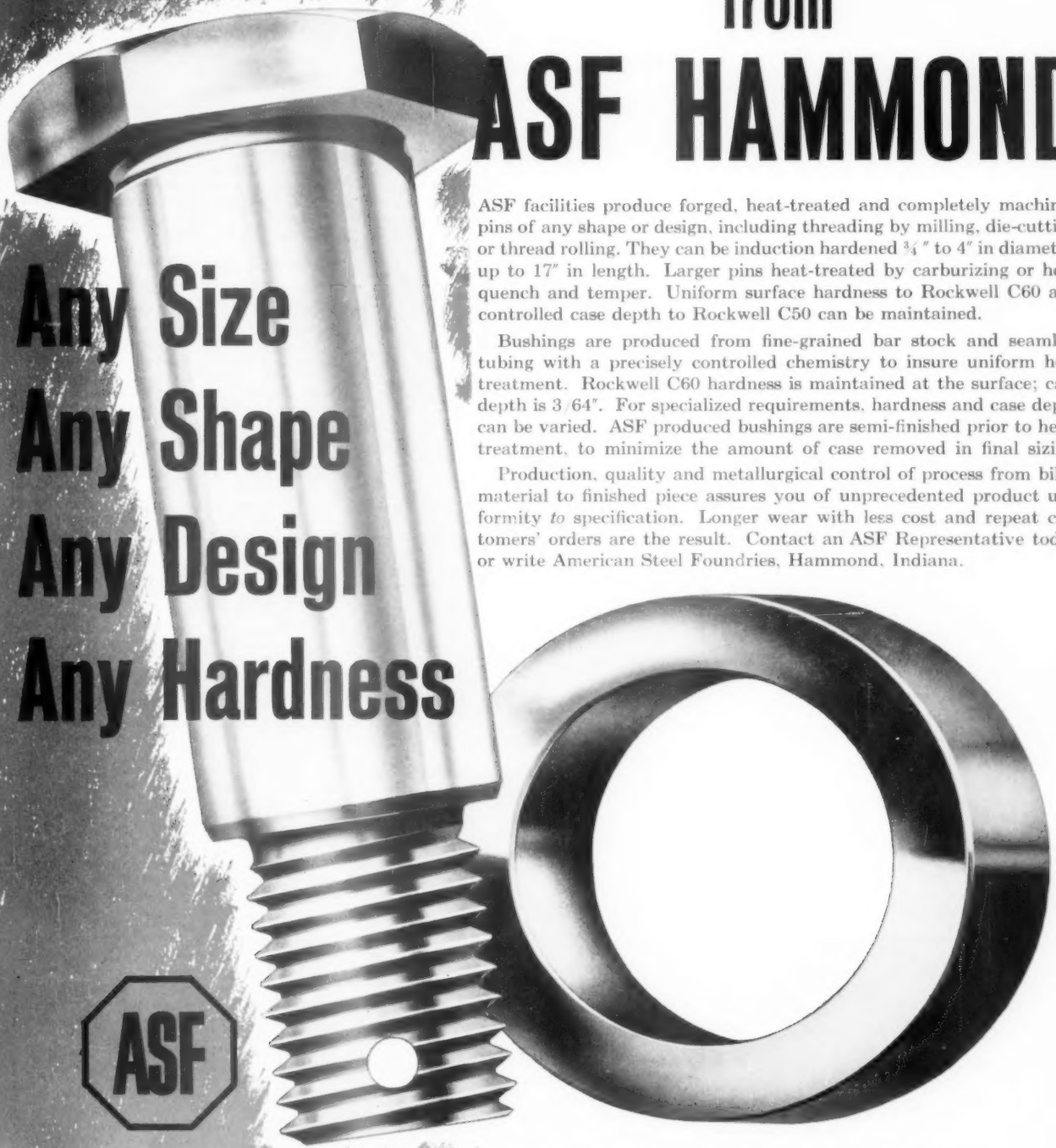
One measure of acceptance of our Freight Traffic issues is the volume of articles reprinted from their pages. We took orders for a total of 33,750 reprints from shippers, mostly, and from manufacturers and railroad men, of 11 different freight traffic articles in the last 12 months alone.

Besides welcoming the newcomers, here's a tip of our hat to the industrial traffic man who is increasingly coming into the light that the importance of his position really commands.



PUBLISHER

PINS and BUSHINGS from ASF HAMMOND



Any Size
Any Shape
Any Design
Any Hardness

ASF facilities produce forged, heat-treated and completely machined pins of any shape or design, including threading by milling, die-cutting or thread rolling. They can be induction hardened ¾" to 4" in diameter, up to 17" in length. Larger pins heat-treated by carburizing or heat quench and temper. Uniform surface hardness to Rockwell C60 and controlled case depth to Rockwell C50 can be maintained.

Bushings are produced from fine-grained bar stock and seamless tubing with a precisely controlled chemistry to insure uniform heat treatment. Rockwell C60 hardness is maintained at the surface; case depth is 3/64". For specialized requirements, hardness and case depth can be varied. ASF produced bushings are semi-finished prior to heat-treatment, to minimize the amount of case removed in final sizing.

Production, quality and metallurgical control of process from billet material to finished piece assures you of unprecedented product uniformity *to* specification. Longer wear with less cost and repeat customers' orders are the result. Contact an ASF Representative today or write American Steel Foundries, Hammond, Indiana.

ASF

AMERICAN STEEL FOUNDRIES

HAMMOND DIVISION • Hammond, Indiana

SALES AGENTS: Delano & Company, Jacksonville, Florida • Mells Cargo Supply, San Francisco, California

Manufactured and Sold in Canada by the International Equipment Co., Ltd., Montreal 1, Quebec

PEOPLE IN THE NEWS

ATLANTIC COAST LINE—LOUISVILLE & NASHVILLE.—Charles R. Yates, vice president—finance at New York, will, effective July 1, direct the financial affairs of both roads from a newly established office in the 270 Peachtree Building, Atlanta, Ga.

S. B. Lewis appointed general passenger agent in a new city ticket office to be established by the ACL in the Francis Marion Hotel Building, Charleston, S.C. Mr. Lewis has been ACL representative in Charleston for more than 40 years.

T. C. Herndon appointed staff assistant, Jacksonville, Fla.

R. A. Balkcom named general agent, San Francisco, Calif.

CANADIAN NATIONAL.—Charles C. Gillespie, superintendent of road transport, has been named to the newly created position of general superintendent of highway services. His task will be to co-ordinate the handling of express, less-than-carload freight, with the company's highway and merchandise services. Close coordination will be developed initially on the Atlantic region, with introduction later to other areas.

A. C. Weaver appointed system transportation engineer, Montreal, succeeding **A. E. Street** (RA, June 19, p. 32).

L. R. Bishop, freight claims agent, Winnipeg, Man., retired.

Horace G. Constable appointed freight sales representative Atlantic region. Plan II piggyback operations. **Donald J. MacMillan,** secretary to the regional vice president, appointed commercial piggyback sales representative, Plan I, Atlantic region.

Graham Langley appointed industrial agent, Atlantic region.

J. R. MacMaster appointed training supervisor, Atlantic region, and will instruct personnel in freight rates and related matters.

CANADIAN PACIFIC.—T. F. Donald, superintendent of motive power and rolling stock, Prairie region, Winnipeg, retires June 30.

CHICAGO & NORTH WESTERN.—James C. Helliker appointed district sales manager, Tulsa, Okla. **Donald S. Groves** named general agent, Denver.

CHICAGO, WEST PULLMAN & SOUTHERN—James E. Rice elected president and general manager, Chicago, succeeding the late **Harry N. Collins.** Mr. Rice was formerly assistant superintendent.

ERIE-LACKAWANNA.—Carl S. Kinback, division superintendent, Hornell, N.Y., retires June 30.

FRISCO.—T. M. Mason named assistant superintendent, Central division, Fort Smith, Ark.

E. W. Gatzert, assistant purchasing agent, Springfield, Mo., retires July 1.

GREAT NORTHERN.—Claude K. Graham, city freight agent, Los Angeles, named district freight and passenger agent, Detroit.

LAKE TERMINAL—NEWBURGH & SOUTH SHORE—DONORA SOUTHERN—McKEESPORT CONNECTING — NORTHAMPTON & BATH — HANNIBAL CONNECTING.—Raymond G. Wintrich appointed assistant to president of these roads, Pittsburgh, Pa.

MILWAUKEE.—Donovan W. Spencer, marketing analyst, Chicago, named grain marketing representative, Minneapolis.

MISSOURI PACIFIC.—Ray T. Oliver appointed administrative assistant to the assistant vice president—sales, St. Louis. **Ronald S. Crossman** named manager traffic analysis; **Clifford C. Hahne,** manager of services; **Richard T. Williams,** manager merchandise sales, all at St. Louis.

The following appointed regional sales managers: **Carl A. Becker,** St. Louis, Mo.; **Harold W. Kassling,** Chicago; **William H. A. Turner,** Kansas City, Mo.; **William J. Siering,** San Francisco; **George Brunner,** New York; **Gardner J. Wilkes,** Little Rock, Ark.; **Oliver W. Storck,** Atlanta, Ga.; **Edwin J. Falk,** Houston, Tex.; **Leland B. Bartlett,** Denver, Colo.; **Charles Hofer,** Detroit, Mich.; **Gus O. Oliver,** Pittsburgh, Pa. **Frank L. Evans, Earland Sandstrom** and **Grady B. Riggan** named assistant regional sales managers at San Antonio, Houston and New Orleans, respectively.

NEW HAVEN.—William Scheibler named general manager at New Haven, Conn. (RA, June 5, p. 39).

NORFOLK & WESTERN.—Charles W. Burns named general western freight agent, Chicago.

ROCK ISLAND.—Oscar W. Limestall, assistant to the president, elected vice president-operations, to succeed **J. H. Lloyd,** resigned.

SANTA FE.—M. D. Breeden appointed acting superintendent of communications, Topeka, Kan., succeeding **D. R. Weems,** on leave.

William Scheibler
New Haven

Herman A. Nelson
SP

SOUTHERN.—W. Bryant Smith, commercial agent, Columbia, S.C., appointed division freight agent there, succeeding **Job H. Little,** retired. **Kenneth Askegren,** commercial agent, Pittsburgh, Pa., appointed district freight agent, Lynchburg, Va.

SOUTHERN PACIFIC.—Herman A. Nelson, assistant general auditor, appointed general auditor, San Francisco, to succeed **U. E. Nordeen,** who retires June 30.

Olof G. Linde, senior assistant division engineer, Los Angeles division, Los Angeles, named division engineer, Northwestern Pacific, San Rafael, Cal., replacing **C. E. Neal,** promoted. **Joseph W. Fergusen** succeeds Mr. Linde. Effective July 1, **R. W. Humphrey** appointed executive assistant, and **M. A. Greene** named supervisor of insurance, both at San Francisco.

J. M. De Martini, assistant manager system research, San Francisco, appointed manager, data processing, a new position. **D. C. Kouns** named assistant manager, data processing. **F. C. Peaslee** appointed assistant to manager, data processing.

TEXAS & NEW ORLEANS.—E. V. Purdy, purchasing agent, Houston, Tex., retires June 30.

Supply Trade

Floyd E. vonOhlen, regional representative, **Electro-Motive Division** of **General Motors,** San Francisco, has been appointed Western special representative there, to succeed **Corliss A. Bercaw,** retired.

Dr. Robert B. Blodgett has been appointed director of research of the **Okonite Co.,** Passaic, N.J. **Richard C. Waldron** has been named chief engineer, succeeding **Dr. Robert J. Wiseman,** who retired Dec. 31, 1959, but who now serves as Okonite's cable consultant.

Bruce R. Williams has been appointed assistant sales manager, **Vellumoid Co.** of Worcester, Mass., manufacturer of fiber gaskets for the railroad, automotive, aviation, electrical, appliance, chemical and petroleum industries. Mr. Bruce was formerly with Mobil Oil Co. at Buffalo, N.Y.

American Brake Shoe Co. has announced that its cast iron freight car wheel plant at St. Louis, Mo., is being converted to the manufacture of "Southern" cast steel wheels at a cost of $2,000,000. The company is also spending $1,000,000 to expand a large, modern cast steel wheel plant which it has operated at Calera, Ala., since 1954.

Effective June 16, certain executive functions of **Fairbanks, Morse & Co.,** moved to

TWO NOLAN RE-RAILERS
with outstanding service features!

Nolan Model DW Rerailer

Model DW Rerailer for heavy-duty service. Will engage wheels at a greater distance from rails than any other type. A proven rerailer for diesel locomotives.

Nolan Model SW Rerailer

Model SW Rerailer for general use on diesel locomotives, freight and passenger cars of all types. Light weight; easily placed.

Write for Complete Catalog
THE NOLAN COMPANY
160 Pennsylvania St., Bowerston, Ohio

new offices at 100 Electra Lane, East Station, Yonkers, N.Y. Located at the Yonkers address will be the president, corporate vice president, controller, secretary, treasurer, and the legal, accounting, and public relations—advertising departments. The present headquarters of the company will remain at 600 South Michigan Avenue, Chicago 5, where offices will be maintained by the president, executive vice president, vice president of marketing, and other key personnel in the marketing, traffic, sales training, customer service, and security departments.

David W. Marchant, president and general manager, **Koehring-Waterous, Ltd.,** Brantford, Ont., has been named president and general manager, **Koehring Division,** Milwaukee, Wis., succeeding **E. A. Brugger,** who has accepted a new assignment abroad in connection with the company's European and overseas activities. **Kensal R. Chandler,** assistant vice president of sales, **Koehring Division,** replaces Mr. Marchant in Canada.

Industrial Traffic

Humble Oil & Refining Co. has announced formation of a supply and transportation department as a part of the headquarters organization. **D. M. Cox** will serve as supply and transportation coordinator. Four new managers will assist: **John G. Yeager,** for crude oil; **C. C. Garvin, Jr.,** products supply and distribution; **Haylett O'Neill,** purchasing, and **N. C. Dunn,** traffic.

Doyle S. Smith, assistant manager, has been promoted to manager, transportation department, **Continental Oil Co.,** Ponca City, Okla., succeeding **C. O. Reeder,** who retired May 31.

Robert W. McGowan, Jr., has been appointed director of traffic of **Peabody Coal Co.,** St. Louis, effective July 1. He was formerly traffic manager of Property Owners' Committee at Washington, D. C.

Anthony Sarkis has been appointed traffic manager with **Crucible Steel Co. of America,** Pittsburgh. He was formerly district traffic manager at the Midland, Pa., works.

The following transfers have been announced by the **Ralston Purina Co.: J. F. Roeser,** traffic manager, Cincinnati, Ohio, to St. Louis, Mo., as division coordinator; **Ray Carter,** traffic manager, Kansas City, Mo., to St. Louis as grain rate specialist; **C. W. Moses,** traffic manager, Louisville, Ky., to St. Louis as Southern divisional traffic manager; **G. O. Womack,** traffic manager, Oklahoma City, Okla., to Louisville as traffic manager; **R. M. Joiner,** traffic manager, Raleigh, N. C., to Memphis, Tenn., as traffic manager; **R. H. Shipley,** traffic manager, Memphis, to Kansas City, Mo., as traffic manager; **D. W. Hudson,** traffic department, Buffalo, N. Y., to Cincinnati, Ohio, as traffic manager; **C. E. Jenkins,** traffic department, Nashville, Tenn., to Raleigh, N. C., as traffic manager; **Don Lemm,** traffic manager, Fond du Lac, Wis., to Battle Creek, Mich., as traffic manager.

OBITUARY

Charles V. Ahern, 58, vice president and general manager, **Pacific Fruit Express,** died June 11 at his home in Woodside, Calif.

YOCAR

1,000 CLASSIC EXAMPLES

THESE 1,000 HOPPER CARS make 1000 classic examples of heavy repair work by YOCAR. These 70-ton Nickel Plate cars have been tailored and fitted by YOCAR engineers — men of imagination . . . men of experience . . . and men who perform with the highest standards of quality and workmanship.

More than 40 years of railroad experience have given YOCAR the answers for doing the job faster and better at lower cost.

Write today for a free copy of the YOCAR "Railroads" folder on railroad products, components and car repairs.

YOCAR YOCAR

Youngstown Steel Car Corporation

NILES, OHIO

You Ought To Know...

PRR will cut coach fares an average of one-third for weekend round trips between major cities on its New York-Washington line starting July 1. Saving for the full distance will be $7.10.

A 15% increase in commuter fares has been asked by the Grand Trunk Western of the Michigan Public Service Commission. The increase would offset mounting operating losses incurred in its Detroit suburban service.

New Jersey's objections to details of a New York bill permitting the bi-state Port Authority to buy and rehabilitate the Hudson & Manhattan appear likely to be ironed out when the N. J. Legislature reconvenes this summer, it was reported last week.

Parliamentary criticisms of the Canadian National (to which CN is particularly subject because of its status as a government-owned railway) have a seriously adverse effect on CN's morale, President Donald Gordon told the annual session of the Commons Railways Committee last week. Mr. Gordon told the committee, which in recent years has examined phases of CN operation in minute detail, that members of Parliament should come directly to management with their railway problems rather than airing them on the floor of Commons and in the press.

Some 400,000 new jobs would result from Washington action to provide a "Magna Carta for Transportation," AAR Vice President J. Handly Wright has told the Great Lakes Region Shippers Advisory Board. A quarter of these new jobs, he said, would be opened up on the railroads, and the rest by manufacturing companies stepping up output due to increased railroad purchases.

A new auto-loading rack was unveiled last week by the Paragon Bridge & Steel Co. Called a "Bi-Tri" rack, the device, which has two stationary decks like present bi-level racks, can carry 12 standard-size automobiles, like present tri-level racks. When loaded with 12 standard-size Ford cars, Paragon says, the overall height of the rack is 16½ ft.

Need for more TOFC cars is expected to develop following completion of two large new piggyback terminals at Jersey City and Chicago, says Erie-Lackawanna President M. G. McInnes. E-L has purchased 210 piggyback cars in the last seven months.

SUNA's right to submit negotiated agreement to a membership vote was upheld by the U. S. Court of Appeals. Western carriers want a rehearing on the order that also dissolved a district court anti-strike injunction.

An Eisenhower Exchange Fellowship for study and travel abroad has been awarded to James H. Sites, manager of the AAR's news service in Washington. Mr. Sites will spend several months studying transportation systems in Western Europe, Russia and the Middle East.

A Boston real estate developer has purchased Portland, Me.'s Union Station. The 73-year-old building will be demolished immediately and replaced by a modern shopping center with buildings covering 125,000 sq ft. The sale includes the former station building, its tower and train-shed area, plus about 12 acres of land.

Seaway traffic through May was up 20.7% on the Montreal-Lake Ontario section, and 1.1% on the Welland Canal section, compared to the corresponding 1960 period. Down-bound tonnages (mostly grain) for both sections reflect substantial increases, but these are partially offset by decreases in up-bound tonnages, such as iron ore. Traffic for the month of May through the Montreal-Lake Ontario section reached the highest monthly point since October 1959.

Industrial development possibilities of the southern Illinois region were discussed at a day-long industrial development workshop June 22 sponsored by 10 railroads and attended by nearly 125 business and civic leaders interested in bringing new industry to the area.

The 1,500th G85 center sill piggyback flat car will have rolled off the assembly line at General American's East Chicago, Ind., plant when GATC completes the 100-car orders it is now filling for Santa Fe and Erie-Lackawanna.

The 1960 loss and damage bill of Class I railroads amounted to $110,005,943—or the equivalent of 24.7% of their net income that year, according to an AAR summary. Loss and damage per 1,000 ton-miles was 19.22 cents in 1960, compared with 18.80 cents in 1959.

New officers of the AAR Accounting Division are H. J. Ward, comptroller of the Pennsylvania, chairman; J. A. Tauer, Great Northern vice president and comptroller, first vice chairman; Y. D. Lott, Gulf, Mobile & Ohio vice president and comptroller, second vice chairman. They were elected at a meeting of the General Committee; the division's 1961 annual meeting was cancelled.

Data processing on the Canadian National will take a big step forward this summer with installation of an IBM 7070 magnetic tape computer at the road's Montreal headquarters. The giant computer will work in conjunction with medium-size IBM 1401 computers at CN regional headquarters in Winnipeg, Moncton, Toronto, Edmonton and Montreal.

Automatic control of "gap fillers"—metal gratings that bridge the space between curved platforms and subway-car doors—is now in operation at the 14th Street Station of New York City's Lexington Avenue subway line. Heretofore, the gratings were manually controlled to reach out to meet car doors when a train was in the station.

Advertisers' Index

American Steel Foundries 65
Atlantic Coast Line RR 33

Buckeye Steel Castings Co. 27

Chicago, Burlington & Quincy RR 47
Chicago, Milwaukee, St. Paul & Pacific 24
Clevite Corporation 35

Edgewater Steel Company 42

Foster Company, L. B. 15, 69

General American Transportation 38, 39
General Railway Signal Co. .....BC
General Steel Industries, Inc. St. Louis Car Company 11
Graybar Electric Co., Inc. 48, 49
Great Northern Railway Co. 45

Hunt Co., Robert W. 69
Hyatt Bearings Div., General Motors Corp. 18, 19

International-Stanley Corp. 25

Louisville & Nashville Railroad Company 22

W. H. Miner, Inc. 3

New York Air Brake Co. 34
The Nolan Company 66
Northern Pacific RR Co. 16, 17

The Okonite Company .....IBC
Harry F. Ortlip Co. 52

Pullman-Standard, Division of Pullman, Inc. 54, 55

Railway Express Agency—REA Express 46
Reynolds Metals Co. 36, 37

Santa Fe Railway 50
Seaboard Air Line Railroad 51
Servo Corporation of America 23
Smith Barney & Co., Inc. 50
Southern Pacific Co. 40, 41
Southern Railway System 28, 29
Symington-Wayne Corp., Symington Division 12

Travelift, Div. of Drott .....IFC

Union Pacific Railroad 43
Union Switch & Signal Div. of Westinghouse Air Brake Co. 4
Unity Railway Supply Co. 8

Vapor Heating Corp. 53

Weiss Co. B. M. 69

Youngstown Steel Door Co. 6
Youngstown Steel Car Co. 67

Looking for a job? *Looking for a man?*

use this space to get reliable leads, quicker results

EMPLOYMENT OPPORTUNITIES SECTION

Railway Age, 30 Church St., New York 7, N.Y.

CLASSIFIED ADVERTISEMENTS

Robert W. Hunt Company
ENGINEERS
Inspection—Tests—Consultation
All Railway Equipment
General Offices:
810 S. Clinton Street
CHICAGO 7
All Principal Cities

SALE OR RENT
45 Ton G. E. D. E. Loco. 300 H.P. Cooper-Bessemer Engine
65 Ton Porter D. E. Loco. 400 H.P. Cummins Super-Charged Engines
B. M. WEISS COMPANY
Girard Trust Bldg.
Philadelphia 2, Pa.

KEEP BUYING U.S. SAVINGS BONDS

Nation's Largest Warehouse Stocks
RAIL AND TRACK MATERIAL
PIPE, VALVES, FITTINGS
L. B. FOSTER CO.
Pittsburgh 30 · New York 7 · Chicago 4
Houston 2 · Los Angeles 5 · Atlanta 8
Cleveland 35

WANTED
editions of *Locomotive Cyclopedia* 1947 or earlier. Please state condition of books and price including packing and shipping. Box 955 Railway Age, 30 Church Street, New York (7) N. Y.

DATA SHEETS

A 32 page booklet, "Meters and Test Equipment" covers such subjects as Basic Meter Movements, Ammeters, Voltmeters, Insulation Testers, Decibel Measurements, Oscilloscopes, and the West Test Set. A brief test of the material covered is included. The booklet is designed to give the signal and communications maintainer or helper valuable information on his most important tool—his test equipment. Available at 50 cents each from

Robert W. McKnight, Editor
Railway Signaling and Communications
Dept. RA, 30 Church Street, New York 7, N. Y.

"AMERICA THE OBSOLETE?"

Reprints AVAILABLE

What will Congress do about adopting a more realistic policy on depreciation allowances?
The need and urgency for action was the subject of the Railway Age Special Report "America the Obsolete?" published in the March 20, 1961 Issue. Reprints are available for your distribution. One to 10 copies 35¢ each. Special discounts on quantity orders. Write to

George Johnson
Railway Age
30 Church Street New York 7, N.Y.

Future Up To Shippers

America is far advanced in a transportation revolution. It is a revolution that is proving disastrous for railroads. If not arrested or modified it may ruin them completely. The damage being done to the purchasers of transportation is fully as great as to railroads—perhaps even greater. Why do shippers complain so little? Aside from a solitary and prophetic voice here and there and now and then, "no comment" best describes the position so far assumed by most of the organized shipping community.

Here is a mystery that needs solving, and quickly. It is like the "Checkmate" program on television. There are machinations afoot which are going to lead to murder if the crime-prevention sleuths don't get to work fast and skillfully. But, in the plot against railroad vitality, it is only the intended victim who is taking energetic preventive measures. So far the success of these measures has been nothing to brag about.

ARE TRAFFIC MANAGERS STATESMEN?

The future of the profession of traffic management is at stake in the way this issue is met and solved. Is traffic management merely a high-level clerical job, something that can be entrusted largely to a calculating machine—wherein the manager's responsibility ends when he gets for his company the lowest-priced transportation available, now, in 1961? Or is the traffic manager's job a branch of industrial statesmanship—where the incumbent is expected to look forward to the well-being of his company's transportation service, not only in the current year, but ten years from now, and thereafter?

Professor Ernest Williams has estimated that uneconomic distribution of traffic among the several forms of transportation is *costing Americans several billion dollars on freight alone*. If this observation is true—and who can question that it is—then it certainly must stand as a challenge to the profession of traffic management. What should traffic managers be doing to correct conditions that are costing their employers, and the customers of their employers, several billion dollars a year?

The fact is that, not only is transportation service costing American industry and its customers, on the average, far more than it should—but the nation's industrial map is being radically and wastefully altered. A vast amount of industrial development is going on along improved rivers and coastal canals. To the degree that this relocation of industry is attracted by genuinely lower costs, it is in the national economic interest. But to the extent that the "lower costs" are merely a matter of appearance—because costs of waterway improvement and maintenance are paid for by taxes—then the booming industrial development along improved waterways is anti-economic. Such uneconomic capital expenditure is just as effective a way of helping Khrushchev as it would be to hand him "classified" information from the Pentagon's secret files.

The colossal interstate highway system, now under construction, is wholly a political enterprise—connecting the political capitals of the states.

TEST FOR ECONOMIC SOUNDNESS

The traditional economic test of the soundness of a proposed capital investment is not applied to any of these governmental transportation enterprises. The question is not asked: Will this project attract enough new paying customers to meet all capital costs (including taxes)—and still leave a margin for profit? Railroad expenditures, meanwhile, still have to meet this traditional and realistic test. Because they're subjected to competition that doesn't have to meet these tests—very little capital is now available for railroad improvements. The inherent economies of railroad transportation are being hidden and obliterated by repeated avalanches of the most colossal series of pork barrel projects the world has ever seen.

If capital expenditures being poured into inland waterways were, instead, being made available for railroad improvements—quite likely transportation costs would be decreased far more than inland waterways will ever reduce them. Furthermore, if the economies were being effected by railway development, they would benefit—not just the places on navigable water—but all origins and destinations.

WHERE IS THE LEADERSHIP?

To whom can America look for leadership to put an end to colossal waste in transportation? Such waste is suicidal, because of its destructive effect on the nation's comparative industrial and military strength in an era of international peril. There are no voices in America better qualified to speak authoritatively on these issues than those of industrial traffic management. There is not much hope, either, that present deterioration of conditions in transportation is going to be improved unless these natural leaders of transportation fully assume the opportunity and responsibility that is theirs. It's up to the shippers whether economically sound transportation survives—and the survival of America itself may well depend on how this issue is surmounted.

when DOWNTIME'S no fun rely on Okonite DEL cables

For this HO gauge hobbyist tracing down a short-circuit is relaxing, but for the professional railroader trouble in the electrical system of a diesel is a costly and time-consuming business. That's why so many diesel installations rely on Okonite-Okoprene Diesel Electric Locomotive cables—DEL—the cable that is manufactured to the exacting standards of the railroad industry.

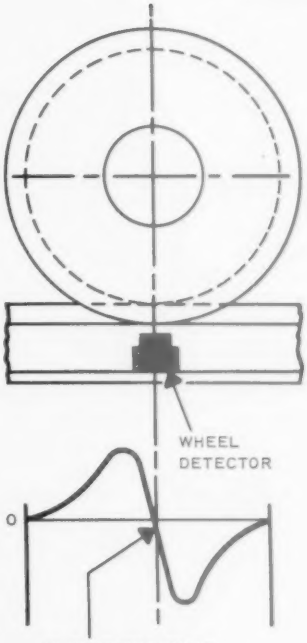
There are no tougher demands made on an installation than those found on a diesel. Generator leads, motor leads, lighting systems, headlight wiring, cab signal wiring —all must withstand heat, moisture, mechanical abuse and oil. Type DEL constructions were expertly engineered and are quality controlled during manufacture to meet these requirements. Okoloy-coated conductor strands provide necessary flexibility . . . Okonite insulation adds high tensile strength, elasticity, high electrical value and exceptionally long service life . . . the Okoprene sheath is non-flammable, mechanically strong, moisture and oil-resistant and can withstand sunlight and weather extremes.

DEL cables are available for both conduit and exposed installations. For the complete story of Okonite cables for railroad use, write for Bulletin RA-1078. The Okonite Company, Subsidiary of Kennecott Copper Corporation, Passaic, N. J.

where there's electrical power... there's **OKONITE CABLE**

8377

HOW—
THE GRS WHEEL THERMO-SCANNER Detects Every Wheel - Every Overheated Journal



ELECTRONIC GATE
OPENS .003 SEC. AT
CENTER OF WHEEL
(SAME AT ALL SPEEDS)

There are no missed wheels with the GRS Wheel Thermo-Scanner, because of the unique, ultra-fast method of "time-gating"—or viewing the wheel precisely at the most effective time.

As a train passes, infrared radiations in the desired wave length range are focused on a quantum detector, a photon-responsive heat sensor which reacts in 15 millionths of a second—300 times faster than slow, bolometer type sensors.

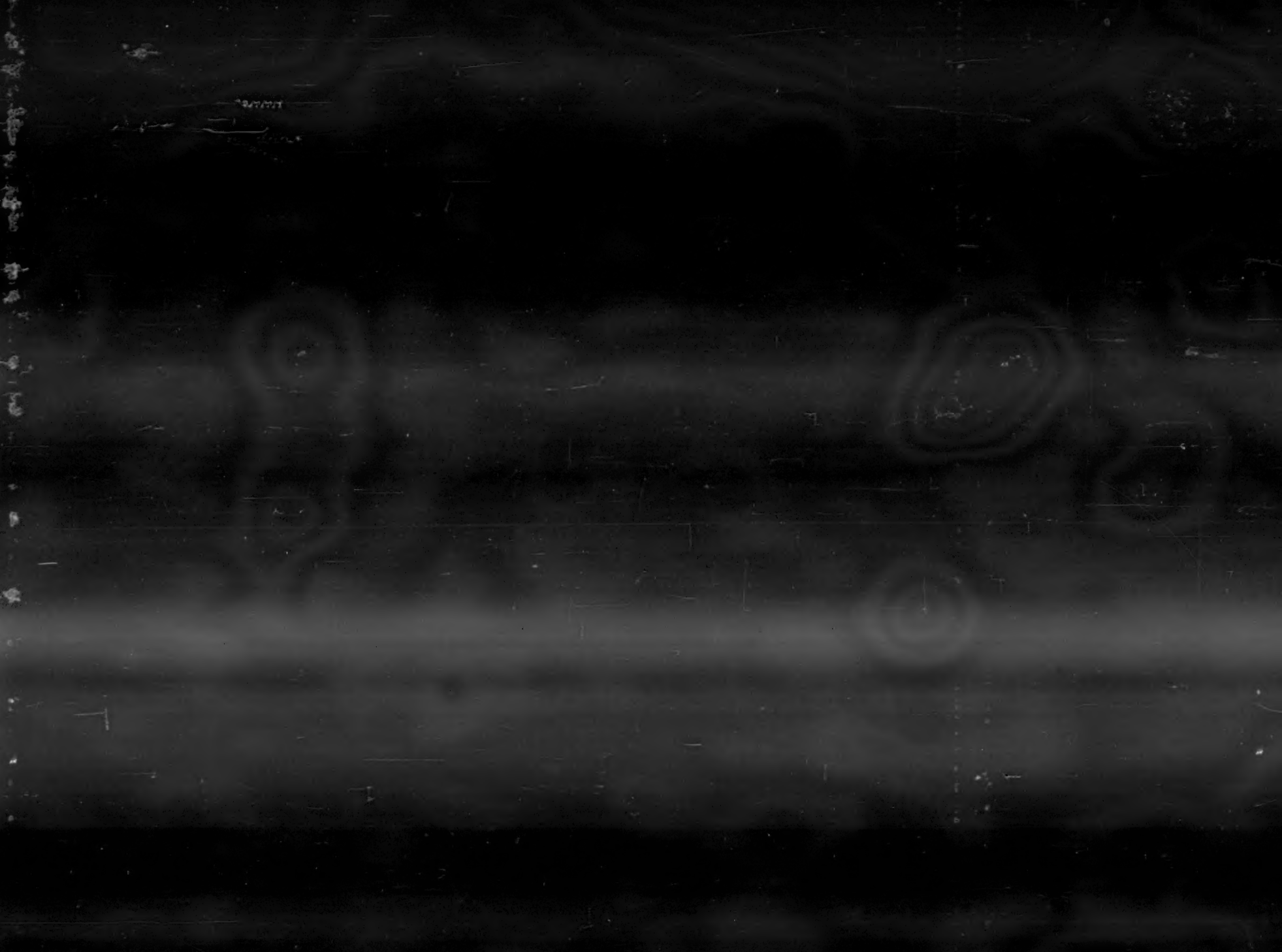
A single, fast-response wheel detector, clamped to the rail, creates a magnetic flux around the rail head. The gate is triggered the instant the center of each wheel passes the center of the wheel-detector flux path. The gate stays open .003 second, regardless of train speed. During this gating time, the quantum detector is viewing the wheel hub—the closest available point in direct contact with the journal—and converts the temperature rise to an analog voltage for recording purposes.

In effect, each wheel snaps its own heat picture with ultra-high speed. Like a fast camera, this ultra-fast gating eliminates the undesirable effects of train movement.

The GRS Wheel Thermo-Scanner has been proved in service. Write for Folder 179 for more information.

3136

GENERAL RAILWAY SIGNAL CO.

ROCHESTER 2, NEW YORK

NEW YORK 7, NEW YORK CHICAGO 1, ILLINOIS ST. LOUIS 1, MISSOURI